

SUPPLEMENT.

The Mining Journal, RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

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Original Correspondence.

MINING INDUSTRY OF LAKE SUPERIOR.

I had not time to write for quite a lengthened period, but have been much interested in some subjects that have been discussed, and on which I might offer some ideas from my stand-point, had I the time to do so.

For the most part must be aware that "good times" are being experienced in the iron and copper regions of the Lake Superior. Iron mining is receiving a great deal of attention, necessary to open a mine, and the time required to get a market, being trifling. Mine after mine—or rather quarry—of the richest iron ore is being opened up, and to be as far off as ever, for the iron industry of Lake Superior is yet in its infancy. A largely increased production of copper will not, in all probability, be the result of this season's work, and this must continue anything like the price of the past year or two. The production of copper will not, in all probability, be more over last year. The older mines will, as a whole, stand. Two or three that have been idle are now in order, but 800 tons of ingot copper from them is not business. Any important addition must come from the Hecla Mine. The product of this concern over 9000 tons of 80 per cent. mineral. This year, the monthly product has been increased, until in May it reached the enormous quantity of 1068 tons. It is not to offer anything further to show that the mine is the best in the world. The rock taken from it when it is 5 to 6 per cent. of mineral, the amount being from 18,000 to 20,000 tons. The length of the shaft is about a mile. All the rock broken is sent to the mill, and so rich is it in places that it is with extreme care drilled in the lode.

Copper raised in May month is not less than \$500,000, and production not more than \$150,000. This rate of production will make the profits of the current year larger than they exceeded \$3,200,000. This mine is, of course, and stands so far ahead of the others as to be an ancient development, and statements made regarding it, lead to the conclusion that in a year or two new developments which, if not equal to it in production, will be anything else in the country. A profit of \$200,000 is year from both the Quinag and Central Mines. The county has been doing a good deal of talking over a year. Mining has been commenced, and quite a little capital. There is no question about the quality of some of the ore produced, but it will take pretty much the same amount of silver is available. Silver-mining in the Lake Superior shore has pretty nearly "fizzled," there are "indications" in the veins of the region, but Silver shipments of ore have been but trifling: \$400,000 set on the ore shipped this spring from Silver Islet, last winter's work.

As in paying quantities, is as yet an open question, but it exists to that extent, more do not. A late report of an extensive tract of the lands has been sold, on the statements made are endorsed by parties coming to examine the veins. Another report says that evil "indications" have been discovered: this, if true would not be a body. The most strange part of the affair is that a number of competent Cornish tin miners on known to the parties interested, only one has been seen and report upon the property. Were outsiders and no interest in it, they might expect his report to it. An endorsement by three practical miners, and they are here, would settle the question, and render it for the purpose unnecessary.

The question of drilling machinery is at a stand-still. It is certain whether its use is a success, financially, in the Lake Superior country has been a steady opening of navigation. Quite a proportion of the work of all who come, and undoubtedly there is inducement is the rate of wages which prevail here. Mining from \$65 to \$80, and even \$100 per month; the men, \$20 per month. With copper at 30 cents, would afford these rates of wages, only asking that the labour should be equal to the demand. In the matter of all cannot begin to compete relatively.

There are dry, clean, roomy, well ventilated, and in the deep ones are provided with a man-engine. Labour are more than in Cornwall, but the miner has a door; he lives in the mine; a few minutes walk to reach his place of labour. The handling of the ore and tramming does not fall to his lot, so that, on the questionable whether as much physical force is required a day's work as would be available in Cornwall. A system of setting contracts were adopted there. The oldness of Lake Superior winters are objectionable, but exception is only taken to their length. There is no doubt, nor does it everlastingly rain, as in Cornwall. The underground, and there the cold is no drawback. As here are more abundant, everybody lives well, and is afforded to those who have a taste for drinking. At Cornwall affords is the number and style of its hotels, and better preachers than we find here, but as a class, are not educated up to that point. A good dinner every day for the benefit of having a treat occasionally. Other reasons might be given, but all things considered, would prefer this country. The foregoing are sufficient to show why emigration continues, in spite of the efforts made to stop it.

The labour of one miner in this region, apportioned of iron or copper, furnishes the world with more than that of three miners in England. The natural resources are here; these have been held in abeyance from want of men and cheaper labour, and on account of the difficulties of transportation. Time is working wonders on the latter question, and the price of metal admits of current rates of wages. The upward tendency of wages in Cornwall, and throughout England, assists in equalising the price of labour with this country, and the nearer the approach to an equality the greater the advantage to be derived here. Cornubia is already awkwardly situated, and the outlook for her does not grow clearer to one who would rejoice at her success.

MINER.

Keweenaw Co., Lake Superior, Mich., June 18.

THE GOLD BEARING GRAVEL DEPOSITS OF CALIFORNIA.

SIR.—The increasing interest taken in the mining of gold-bearing gravel deposits of California has induced me to forward some facts which, should you consider of sufficient public interest, you are at liberty to insert in the columns of the Journal.

The gold-bearing gravel deposits, known to be of vast extent, having been traced in well-defined channels through portions of seven different counties of the State of California—Butte, Placer, Sierra, Nevada, Yuba, El Dorado, and Tuolumne. And where these old gravel channels have been properly opened and worked, either by drifting or by hydraulic process, they have generally yielded good returns, and many companies working this class of mines are annually receiving large dividends.

Two gold-bearing gravel mines, called the North America and the Little York, possess more than ordinary merit, both of which have been purchased by London capitalists, and if the properties are properly worked they will yield splendid dividends to the purchasers, as the gold-bearing gravel is of superior quality. I recently had an interview with the superintendent of the North America, Mr. Morgan, who showed me three specimens of solid gold, weighing from 5½ to 6½ ozs. each, which were taken from the pay gravel of the North America. Mr. Morgan informs me that the mine is looking remarkably well, and is yielding a large amount of rich pay gravel—in fact, double the amount that can be washed out at the present time, owing to the unusual scarcity of water, consequently the company have not been able to wash out over two-thirds of the gravel taken out the past season. This fact should not cause any uneasiness to stockholders, as the dividends are accumulating in the dump, and are simply delayed, but which will be all the larger as soon as water can be procured in sufficient quantity to wash the pay gravel as fast as taken out. And wisdom would seem to dictate to the company at once to secure sufficient water to not only wash their drifted gravel, but also to work by hydraulic process the pay gravel which lies above the drift gravel.

The Little York hydraulic mine is another very good property, and I was surprised to learn the low price for which it was sold, and am glad the purchasers have secured a good bargain. I have also learned that the party who negotiated the sales of both the above properties is now in London negotiating the sale of other mining properties, and for the credit of our mining interests, and the credit of his own good name, I hope he will place them (as in his previous negotiations) at sufficiently low figures to ensure large dividends to the capital invested, and re-establish the reputation which an unscrupulous wild-cat ring in this city has done so much to injure in your market the past three years—the Lincoln Gold Mine, Pyramid Range Silver Mine, and the Mineral Hill imposition, all of which originated with the same parties.

And if English investors would obtain some such mines as the Smartsville gravel mine, of Yuba county, the Pioneer, of Grass Flat, Sierra county, the Indiana, of Morris Ravine, Butte county, or the Consolidated Cedar Spring grant, at Placerville, El Dorado county, and others I could mention, they would then better appreciate the value of our gold-bearing auriferous gravel mines. Each of the last-named mines have millions of cubic yards of rich pay gravel, which will yield large dividends far into the next century.

M. E.
San Francisco, June 12.

TIN IN NEW SOUTH WALES.

SIR.—With the hundreds of thousands of ounces of gold annually pouring into England from New South Wales, the more modest merits of a few hundred tons of tin from our colony also, are likely to be underrated by the miner and the capitalist, the more especially that we also seem to attach a very secondary importance to it in our mining reports per each English mail; but, as a matter of fact, there is scarcely any doubt that in the hands of people who understand tin mining practically and thoroughly there is now an excellent opportunity for investing either skill or capital, or both combined, to great advantage in it, and with infinitely less risk than in gold mining, and for these simple and self-evident reasons—That not one miner here in fifty knows anything about tin mining specially, that his employers in Sydney know nothing at all about it, and that incompetent directors and bad managers have so muddled away shareholders' funds that scarcely anyone cares about it, and the very name of a tin mine (no matter how intrinsically good) makes a business man button up his breeches pocket; and, therefore, anyone now coming forward and offering to take the properties off their hands for a few hundreds would probably be liberally dealt with, and at once enter into possession of land and machinery which have cost thousands, and which practical skill would at once turn to profitable account. There are mines now being left idle of from 500 to 1000 acres each, out of which not 100 square yards, perhaps, have been systematically worked, yet which cannot be made to pay with the mismanagement they have had, and yet which the owners do not like to abandon, because they only pay 5s. per acre annual rental, and, like Mr. Micawber, they hope "something will turn up," and with such an easy rent they can afford to pay, and wait a year or two for the chance. An ounce of tin to the dish is not thought payable, and even from fairly-managed claims from 10 to 15 per cent. of stream tin can be got from the "tailings," or refuse, which is, of course, as a general rule, best to the shareholders. As to the reefs, I do not know of one in the whole colony that is being worked, though there are several known to be payable; but it would entail probably 10000l. for a crushing battery, and so the owners send a few pounds to Sydney as a specimen, and then leave it alone for six months or so to Providence, and then send another specimen, and take another six months' spell. There are, of course several private parties of miners raising plenty of ore at a splendid profit, and also about six

public companies paying a fair dividend—these being the instances when what little skill there is in the colony has been properly applied, evidently proving that we have the mines if we only had the miners, and the men of capital to back them; but, in the face of over 60 public companies, with nominal capitals of from 50000l. up to 75,0000l., either being wound-up, or which we now know (having paid for our experience) ought to be wound-up, the Sydney investors are disheartened, and properties which probably 5000l. skilfully applied to would realise thousands of profit per annum could now be got for the price of next year's rental.

When the rush for tin land set in every man who could scrape 25l. together secured his lease of 100 acres, and the result is that, though there are altogether some hundreds of thousands of acres of tin-bearing land in New South Wales, it is, or is supposed to be, all taken up by private parties from the Government, so that "would-be" investors or speculators now have to lease at second-hand; and here is the real chance for capitalists, because dozens of the present holders secured hundreds of acres last year (hoping to sell at a good profit) when they had only means of their own to pay for tens, and in very many cases the parties from whom they borrowed will sell for what they can get, or even where the land is known to be "likely," make almost any terms with others who will pay the next year's rent, which falls due in September, and must be paid in advance, or else the lease and all rents paid are forfeited. Even with men of means, there are so many other mining calls on them, and the tin district is so (comparatively) far away, and they find they know so little about it, and have so little control over virtually irresponsible managers or men, that, though indisposed to let their claims revert to the Government for nothing, they would be very willing to hand them over to practical men for a modest sleeping interest. There is really an excellent field here, especially if bargains be made before September, for any tin miner who can command about 5000l. as working capital, and providing he makes easy terms with the needy or disheartened lessees. The Government terms are specially easy, as all rents and royalties are included in the annual payment of 5s. per acre; and if at the end of three years the sum of 2l. per acre has been expended an indefeasible title is established and issued. This also gives unlimited right to cut timber and divert and use water; and as the total average carriage from the mine itself to London Docks is under 10l. per ton, there is a large margin for a large profit.

Trusting these few remarks may not be out of place in your Journal, and lead to the mutual advantage of the capitalist at home and the colonist out here, I beg to subscribe myself—R. ADAMS.

P.S.—The reason why 5000l. is mentioned is because it averages about that outlay to cut races, build dams, and open the ground of a tin selection before it becomes payable.

HOLCOMBE VALLEY GOLD MINES.

SIR.—I notice some of your correspondents are enquiring about this company. I have also had similar applications. Will you, therefore, be good enough to publish the enclosed report, made last summer by Mr. G. D. McLean, of the Sweetland Creek Gold Mines. Austinfrans, July 9.

W. J. LAVINGTON.

These mines are situated in Holcombe Valley mining district, in the county of San Bernardino, and State of California, about 35 miles distant from the town of San Bernardino, and 130 from the City of Los Angeles, which latter is 48 hours run by ocean and rail from the City of San Francisco. The Southern Pacific Railroad, when completed, will pass within 30 or 40 miles of the mines. The property consists of a series of nearly parallel lodes, seven in number—South Lode, Olio, Elipse, Mammoth, San Bernardino, Pine Tree, and North Lode, all encased in granite, each 1200 feet in length, varying from 1 ft. to 3 ft. in width. Also 141 acres of auriferous gravel from 20 feet to 50 feet deep. The position of the lodes one to another are in the order mentioned above, and the distance intervening as follows—from the South Lode to the Olio, 215 feet; from the Olio to the Elipse, 315 feet; from the Elipse to the Mammoth, 100 feet; from the Mammoth to the San Bernardino, 132 feet; from the San Bernardino to the Pine Tree, 231 feet; and from the Pine Tree to the North Lode, 160 feet; or 1744 feet from the north to the south lode. For the gravel plot, and the three principal lodes mentioned—the Olio, Mammoth, and San Bernardino—an application for a United States patent was filed in the registrar's office, in the City of Los Angeles, April 2, 1872.

THE OLIO LODE.—This vein pitches south 32½° west, with an inclination of 78°. It has been opened to a depth of 185 feet by a shaft 10 feet by 4 feet; 150 feet below the surface a drift has been run north 75 feet; 65 feet above this another drift has been run 75 feet north from the shaft, and the vein stopped for this width to the surface; this shaft at the time of inspection was filled by a cave, and with water to within 75 feet of the top, consequently any statement herein concerning this mine below water level rests upon the veracity of others, and certificates submitted herewith. Above water level the walls are well defined, but the vein is small; below, however, by both Judge Nichols and Richard Garvey (per certificates) the vein is said to be 2½ feet wide, and by them and Eudel to have paid \$30, \$32, and \$50 per ton for different crushings. The 66 lbs. of rock worked by Messrs. Riote and Luckhardt, of San Francisco, yielding \$10-24 per ton (certificate No. 254) was taken from a waste pile on the surface, and no doubt is below an average, as evidenced by result of assay (certificate No. 1409) which gives \$65-30 per ton.

MAMMOTH LODE.—This lode, as its name would signify, is the largest of the series. It pitches south 38½° west, and has an inclination of 54° 20'; this vein has been opened with three shafts, the one and main shaft, near the centre of the location, the middle one 208 feet, and the third 220 feet south of the main shaft. The following diagram represents the main shaft to scale, with its drifts and stoping. The middle shaft is 50 feet deep, but smaller than the main, an irregular adit is driven north on the vein 53 feet from the bottom of the shaft; the ledge in this shaft is from 18 in. to 2 feet thick, and the rock apparently of higher grade than that of the main shaft. The south shaft is 55 feet deep, and of similar proportions as the main shaft; the vein has been stoped here, north of shaft, 116 feet, and from the bottom of the shaft to the surface, and south of the shaft, 16 feet, from bottom to surface; the vein here is of similar size and appearance to that of the middle shaft. The ledge, however, throughout the entire excavation of the main shaft will average 4 feet in width, consequently it may safely be termed a 3-ft. ledge; this lode has been worked "irregularly" since 1863, and from all the information attainable, including the accompanying certificates, the returns from the various crushings since that time have alternated from \$9 to \$40 per ton. The 1135 lbs. of ore from this lode, worked by Riote and Luckhardt, by mill process, which yielded, including sulphurets, \$13-28 per ton (certificate No. 254) was taken from the ledge in the main and middle shafts, with especial care to obtaining average rock. The 100 lbs. was worked by Louis Blanding, which returned, including sulphurets, \$12-99, was of the same lot of ore, taken after being ground to pulp (see certificates). The approximate amounts per ton returned by these two workings, as well as the similarity of assay shown in the accompanying certificates, renders the results, at least from this lot of ore, pretty reliable. The assays of Messrs. Riote and Luckhardt, and Louis Blanding (as will be seen by reference to certificates), are so wide apart that I am uncertain as to the percentage of sulphurets in the rock, or its value, still the percentage given by each, estimated by the value fixed by each, bring their tests close together. I am satisfied, however, that the percentage of sulphurets is low, whatever their value may be.

SAN BERNARDINO.—This lode, regarded as the third in importance of the series, much resembles the Mammoth both in texture and quality of ore; the croppings of the two converge southward, and the veins may possibly intersect at some point below the surface. The pitch of the ledge is south 31½° west, and its inclination 74° 32'; this vein has been opened by one main shaft near the centre of the location, and two others of minor importance, one north of main shaft 75 feet, and the other 200 feet. The main shaft has been sunk to a depth of 110 feet, and the ledge stoped for 50 feet on each side from the bottom of the shaft to the surface. The ledge in the main shaft is 2 feet and in each of the others 12 in. wide; the value of the ore from the vein for past working (as shown by accompanying certificates) has been

from \$13 to \$25 per ton. The returns per ton of the 52 lbs. worked by Riette and Luckhardt (certificate No. 255) was \$40 per ton; this, no doubt, is over an average, and grows out of the accidental selection of high-grade ore.

SOUTH LODGE, ECLIPSE, PINE TREE, AND NORTH LODGE.—The relative position of these smaller veins to the larger ones described above are as the order in which they are mentioned previously. These ledges run consistently below and above, but can safely be called 12-40 veins; neither of them has been developed to any extent, but the ore from each has been sufficiently tested to prove it to be of equal, if not superior, quality to that of the larger veins, regardless of accompanying certificates of assay to the contrary. Some of these smaller veins doubtless, at a greater or less depth, will intersect or merge into the larger, and swell the latter to greater breadth, and concentrate working. In comparing the lodges, from information obtained from persons familiar with the working of the mines since 1863, including that contained in the enclosed certificates, and from comparison of the rock, there is no doubt but that the ore from the Olio is of the highest grade of the series, and from the same evidence, with modern improvements for mining and milling, we would be warranted in expecting the most flattering results from the Olio, Mammoth, San Bernardino, or the smaller veins. On the other hand, the appearance of the rock and the working test made (see certificates) both indicate low-grade ore. Had the mill on the property have been in running order we could have made working tests from all of the lodges, which are the only reliable guides; however, as before stated, from the working tests made and a careful examination of the ore, taking all of the veins together, in my humble judgment an average yield of \$15 per ton is all that could be confidently looked for.

THE GRAVEL PLAT. (As shown by the accompanying maps) comprises 141 acres of aeriferous gravel, from 20 to 50 feet deep. The northernmost half of this survey, upon the border of which the ledges above described are situated, and the bottom portion of the deposit, for 5 or 6 feet in depth, including the surface and fissures of the bedrock, is represented to be highly metalliferous, as will be seen by reference to the certificates of Messrs. Garvey, Eudel, and Nicholls, by parties long familiar with the working of this deposit; the understratum mentioned is represented to pay from 2 to 50 cents to the bucket. I was unable to test the quality of the gravel myself, the flat being filled with water to within a few feet of the surface, but the extension of this flat still above and adjoining being perforated with shafts of former workings, convinces me of the plausibility of the representations. Were this deposit favourably circumstanced it would be invaluable for hydraulicking, but the elevation is so great that there is no stream above from which to obtain water or pressure. The only favourable plan that presented itself to me for working this deposit would be to sink and drift out the water and gravel by steam, and wash the gravel with the discharge from the pump, using tanks, &c., for husbanding; if this lower stratum is as rich as represented it would pay handsomely for this process.

PLANT.—The machinery on the property consists of an 8-stamp mill, much impaired, through which all of the ore thus far taken from the mines has been reduced, except what has been worked by arrastras; the mill has a 10 by 30 in. engine, and a 20 ft. boiler, the latter comparatively new. Geared to the mill machinery is a saw-mill, complete, capable of turning out 5000 feet of lumber per day. There is also one 10 by 24 in. engine, two boilers, and a pump, used in an ineffectual effort to drain the gravel plat a few feet higher. Also a large double storied boarding house, well constructed, and of sufficient capacity for offices, and for the accommodation of employees. For further particulars refer you to accompanying inventory of Mr. D. P. Bell, a competent engineer and millwright.

WATER.—Holcombe Valley being 8000 or 9000 feet above ocean level, there are no continuous running streams, but the valley is a kind of living spring, and water is found a few feet below the surface in quantities sufficient to battle all efforts heretofore made to drain it. The water from this source to supply the demands of the mill would have to be hoisted 40 or 50 feet by means of a pump attached to the mill machinery. Another source of water would be that pumped from the veins working, which would flow to the mill from the natural inclination of the ground intervening; as to the adequacy of the supply of water from these two sources I have no doubt (see certificates).

TIMBER.—Holcombe Valley and the mountain slopes overlooking are thickly overgrown with forests of pine, fir, and cedar, suitable for all of the requirements of mining, both below and above ground, which considered in connection with the saw-mill mentioned, warrants the supply of lumber at the lowest possible rates—say, from \$8 to \$10 per 1000 feet.

WORKING CAPITAL.—In order to place the property in a condition for advantageous working, a working capital of \$10,000, should be provided for the purchase of building a 20-stamp mill, with pump attached for supplying the battery and boiler with water, a pump and hoisting gear for the shaft, and for sinking the main shaft of the Mammoth drive, driving adits ready for stopping, re-timbering, and placing the mine in every way in condition for active operations. The cost of the mill, pump, and hoisting gear, are set forth respectively in an accompanying estimate of Mr. D. P. Bell. My plan of procedure would not be to sink a perpendicular shaft through hard granite at heavy expense as has been contemplated, but to operate through the main shaft of the Mammoth, which presents the largest body of ore yet developed in the series. The inclination of the Mammoth, as before mentioned, is 54° 20', that of the Eclipse much less, and that of the Olio 78°, or only 12' from a perpendicular; consequently the Mammoth shaft extended down the lode would intersect the Eclipse 175 or 180 feet from the top of the shaft, or 140 or 150 feet perpendicular below the surface, and the Olio 1028 feet from the top of shaft, and 580 feet below the surface upon the pitch of that vein. The Eclipse, when cut, will probably merge into the Mammoth and add to its size, and the Olio tap 650 feet down the shaft, their width holding, would furnish rock for protracted operations; still further extension of the Mammoth shaft would cut the south lode, which is 216 feet from Olio on the surface. A perpendicular shaft 480 feet deep, immersed 120 feet under the hoisting gear of the Mammoth, would cut the San Bernardino 560 feet from the surface on the inclination of the vein, but a cheaper plan, perhaps, would be to sink from the surface on the ledge, connecting the shaft with the Mammoth machinery by means of steam-pipe and pulleys for pumping and hoisting. This being done all of the veins would be commanded with the one hoisting rig, except the Pine Tree and North Lodge, which are both of the smaller size, and the latter so far away as to necessitate separate working whatever plan may be adopted considering the cost of driving through the intervening granite. It is a safe estimate that a 20-stamp mill of approved pattern, substantially constructed, will reduce 35 tons of ore per day, and 10,500 tons for a year of 300 working days; this 10,500 tons, at \$15 per ton, the estimate before mentioned, gives gross for one year \$157,500.

CRUSHING.—The whole cost of mining and milling this ore would amount to about \$8 or \$10 per ton if done with cheap labour, which I understand to be the intention from parties interested, \$8 per ton, and possibly less will cover all costs, consequently the aggregate cost of the 10,500 tons would be \$84,000, and the net profits for the year \$73,500. The distance of the Mammoth shaft from the point selected for the new mill site is 200 feet; from the new mill site to the creek, in order of sinking the perpendicular shaft, should that plan be adopted, is 450 feet. From either to the mill site there is sufficient tramway grade for a loaded car to draw back the empty one.

THE NORTH AMERICA GOLD MINING COMPANY.

SIR,—When, a few months ago, I ventured to predict in the Journal that the "substantial dividend" so often and so confidently promised by our directors, if paid at all, would certainly be the only one we should receive this year, and that instead of receiving a second we should probably be invited to provide, as last year, another \$9000, to send to Mr. Morgan for "labour and stores," I was charged in the Journal by our Chairman with "ignorance and impertinence" for entertaining, and especially for having given publicity to, notions so utterly absurd and unfounded. That gentleman has recently returned from the mine, and, very favourably impressed with all he had seen there, and at the annual meeting had given us (having just been made Chairman by his co-directors) a most flattering account of our property and of its great future, interspersed with the usual quantity of praise of our "most extraordinary manager" (to use our Chairman's own words), Mr. Morgan. But it needed not to visit the mine to find out the real state of matters there, and at 9, King's Arms-yard at home. Read by the light of facts which had gradually transpired, it was only too evident that the great value of the property as represented by Messrs. Morgan, Degroot, and M. Lean in statements to the same effect of Mr. McCulloch Torrens, M. P., his co-directors, and others—when the object was to induce the shareholders to buy the property.

After waiting patiently for a year without hearing anything more of the handsome dividends promised them of 60 to 70 per cent., or getting any dividend whatever, the shareholders began to suspect (there are always two or three discontented ones in every company, our Chairman has told us) that all was not gold that glistened in the gravel of North America, and that in putting their money into the concern on the presumed good faith of mining engineers, directors, and secretaries they had probably seen the last of it. And when, as they were not waiting indications to confirm their suspicions; for instance, to mention but a few of them—the secret and unexplained withdrawal of Mr. Torrens from the board; the suppression of all reports from the mine; the failure to obtain a Stock Exchange quotation; the misleading annual accounts; and the telling fact that no one at the mine itself, or even in California, held a single share in the company. All this naturally caused anxiety and alarm to the most unsuspecting shareholders; but they were told to be patient a little longer, and all would be well. The last season, said their comforters, had been an exceptional one; the water came not at the usual time, and when it did come the ditches were not ready to receive it, and it was lost; but now everything was in perfect order, and the immediate yield of the mine most cheering; there were 20,000 car-loads on the dump, of which the minimum value was \$60,000, besides about \$14,000 more; 400 car-loads a day were being taken out; "the mine was looking splendid" (as it always does on paper); there would be enough of water in December at latest to wash all the gravel in store, and to go on washing more for a considerable period, at the rate of 4000 car-loads a day; and a "substantial dividend" a month after the water came. How these solemn official assurances were fulfilled our Chairman explained at the special meeting held on June 18. Water, he said, was available at the beginning of March, and gold of the value of \$600,000, was realised, which might be regarded as so much profit, although it could not be treated as profit, as Mr. Morgan's accounts had not yet arrived (this accounts never do arrive so as to be submitted to the shareholders at a public meeting or at any other time), and the supply of water did not last long enough to wash more than one-half the available gravel; but he (the Chairman) hoped that before another year there would be something more satisfactory to communicate. This disheartening statement, the very opposite of what in last December our Chairman had led us to expect, naturally excited intense disappointment, and drew from Sir Francis Lytton the very pertinent remark that it would have been less unsatisfactory if the directors had informed them as to the amount of gravel that had been washed and that accumulated, and he might have added the average yield per car-load of the gravel washed.

According to all the official reports there were 20,000 car-loads, and more, on the dump early in December, as 400 car-loads, at least, were being taken out daily, giving 50,000 loads by May 1, worth, at \$2 per car-load (Mr. Morgan's estimate was \$3½), \$100,000; but, as not more than one-half of this gravel was washed (say 50,000), which, deducting two-fifths for cost (Mr. Morgan's estimate), would leave a profit on May 1 of \$54,000, or 10,800 sterling. What has become of this profit? We have only heard of 20000, of it. What has been done with the balance?

Mr. Morgan's weekly reports to the directors necessarily give full details as to the gravel taken out, the accumulation on the dump, the quantity washed, and information on any of these points up to May 1, at any rate? But if he is in the dark as to matters so essential to the shareholders to know, he was sufficiently clear in stating that the capital was all expended in December last, and that Mr. Morgan had carried on the mine in February and March owing the workpeople money, which he thinks he must have paid them before remitting the 20000, called by

courtesy, "profit." How he has carried on the mine since may be surmised from its being a question, as stated by the Chairman, whether there would be money enough to make the necessary improvements.

Can this mean that after spending the \$50,000 (delusively) shown in his balance-sheet as "profit," and claimed for him as such by our Chairman, also the \$9000, and more quietly sent to him in September, 1872, and the present 20000, "profit," the shareholders are to be asked to provide Mr. Morgan with more money to improve a property which was reported last year to be in perfect working order? And with matters brought to this deplorable pass, the late meeting, apparently composed of directors and their friends, carry out a vote of thanks to their Chairman; his co-directors vote him 1000, of the impoverished shareholders' money to visit the mine, although he was going to California "on other business," and a question of confidence in the board, which was held should never have been mooted, as it was only a feeling of disappointment (akin to despair) the shareholders experienced.

But, whilst promoters and their allies may be congratulated on the successful issue of the means they adopted to induce persons, many of them in straitened circumstances, to put their small savings into this concern, by representing it as a property certain to pay them 60 or 70 per cent., at least, but which so far has proved to them very disastrous, I would fain hope that there is one prominently associated with the mine at an early stage who does not share those feelings. It was on his report, which was to be decisive, that the mine was finally purchased, and I cannot believe that Mr. M. Lean, who has gained a high reputation by Sweetland Creek, would write a report which he did not consider warranted in every respect, to the great detriment of many poor and struggling individuals. Instead, therefore, of voting 1000 to our Chairman to go and consult with his friend, Mr. Morgan, I would pay that sum to Mr. M. Lean, an able and thoroughly practical man, for a second report on the property. We should then probably know whether the true cause of failure was in the mine itself or in its management, and whether there was a prospect near or distant of his money or any portion being returned in dividends to—

A SHAREHOLDER IN NORTH AMERICA.

THE COAL QUESTION—EDUCATION AND HARD WORK.

SIR,—I am glad to see that you, in a great measure, agree with the remarks of Mr. Normansell as made by him before the Coal Committee on the question of Education. Some of our local journals denounced them, and say they are only apparent, and not real—a kind of half-truth, not reliable, and in all probability will do much harm amongst the class of miners to which Mr. Normansell belongs. Those journalists, I should guess, have not tried coal-getting. In my opinion, and I have had some experience in the matters, the remarks of Mr. Normansell, so far as the working of coal is concerned, are quite correct. An educated man never did nor never will do as much laborious work at coal-getting as an illiterate one. There are, no doubt, other kinds of labour where education is advantageous and necessary to the kind of work, and probably an educated man may do the same amount of work in less time; but coal-getting *actually* is another thing, and does not require the education. A strong, rough, ignorant man, brought up accustomed to a coal pit does, and always has, produced the most coal while at work. Union now steps in, and tells him how far he must go, and he is as easily led as the best educated man in those things. Let a young man—a collier, of course—have a moderate share of common sense, and educate him; he will then begin to think, and say to himself this kind of work is too laborious for me, cannot I find something else, as you observe, of a "more genteel, cleaner, and easier" profession? I will try.

I will give you the circumstances that occurred to myself. At 7 years of age I was sent to work in a coal mine (much too soon); but there was no Mines Regulation Act then. At 15 I could neither read nor write—of course, not having been to school. At 22 I could do both, and was getting coal; I was also able to calculate the number of foot-pounds I had to raise, besides the force employed for a day's work of coal-getting (which were sadly too large at that time). I at once said, this will never do, and, of course, sought a change as soon as possible, and with a determination of finding it.

I do not wish your readers to understand that I think the colliers ought not to be educated, for I think otherwise; and then machinery, as you say, would do all the laborious work of the mine, for I know there is even yet some that is both hard and bad in some narrow places which has to be done by man, and which might be done both better and cheaper by power. I also think that powder or any other explosive mixture ought not to be used in getting down the coal, so as to prevent the possibility of such occurrences as the late Bryn Hall Colliery explosion, for we have been shown by Mr. Warburton, in his able paper "On Explosions from Blown-out Shots," that, even under the most favourable circumstances, it is not safe to use powder, and, in my opinion, it is an easy matter to get down coal after being properly prepared without the use of explosive mixture.

ONE WITH SOME EXPERIENCE.

REMARKS ON TIN-DRESSING, AND STAMPS GRATES—No. III.

SIR,—Having in the two preceding letters of this series submitted my views and suggestions regarding the changes which I deem necessary to be made in the Cornish stamps, for the purpose of increasing its efficiency and relieving it of the odium under which it has so long lain as a "drudge," I now propose to make a few general remarks in respect of stamping and tin-dressing. It is well known to those who are conversant with the subject that the way in which tin is stamped has very much to do with the economics of its concentration. It is a problem yet to be solved in what way rough or granular tin can be best treated so as to preserve the largest proportion of individual grains intact during the process of pulverisation, which is necessary to effect their separation from their gangue associations. It is very frequently the case that both fine and rough tin are found in different parts of the same lode, and not merely in remote sections of the lode, but in the same shaft, end, winze, and stope. The copper ore tributer finds it to his advantage to preserve a distinction between different classes of ores which he finds in his pitch, and, no doubt, much of his success sometimes depends upon the judgment and care which he exercises in their proper assortment and subsequent treatment. It is no less necessary, in my opinion, to assort and preserve a proper distinction in the working of tin ores than it is in respect of copper, or any other ores of the metallic minerals. To effectually accomplish this object the proper place to begin is down in the mine, and at the time of breaking the lode stuff. Many of the lodges are large, and different parts of the same lodes are very frequently differently composed, and the texture of the tin in each part varies according to the character and texture of the containing matrix. For instance, some lodges are worked by distinct parallel sections, one section consisting almost wholly of peach-chlorite—in which tin of a highly crystalline, or granular mixture is found. This crystallisation is often sufficiently pronounced as to sparkle by the light of a candle, whilst on the other side absolutely distinct classes of matrix are found, and the texture of the tin contained in each separate class differs from the former and from each other.

It not unfrequently happens that on one side of a section of chlorite a distinctive mass of what is called by miners tin capel occurs, whilst on the opposite side is a section of highly crystallised quartz. The texture of the capel is very fine, and jointed like masses of flint or hornstone, to which family it belongs, being almost wholly composed of silex, discoloured, no doubt, by iron or some other metallic oxide. The tin in this stone is correspondingly fine, and in like manner is rougher in the more highly crystallised quartz on the other side. This is not, so far as I have seen, an exceptional condition of the leading tin mines of Cornwall, but one of frequent occurrence. Here, then, there are three different classes of tin in these several matrices in the same transverse section of a lode, and the difference is so great that no common method can be adopted in their dressing or preparation for the market which would be suitable to all alike, but, on the contrary, that which would be best adapted to one class would conduce to excessive waste as respects the others. Such being the case, then, it is clear that in order to avoid the losses incidental to their mixture they should be kept separate, and separately treated both in stamping and dressing, and to satisfactorily accomplish this the producer must be the separator—that is to say, that the different sections of the lode must be systematically mined, and the different products distinctively preserved. This is, certainly, one of the cases where inattention to preliminary matters seriously affects and embarrasses the details beyond the possibility of redemption or repair by any subsequent substitutional or remedial measures. Errors of this kind defy correction; they may be extenuated, but cannot be obliterated. In respect to mining, as of many other industries, certain measures must take precedence of others to ensure regularity in the system of working, and success as to the result. If primary and secondary measures be transposed, or merely confounded, the effect of such an inadvertence cannot be excluded at

any subsequent point of the process in detail, but must countenance and vitiate the results.

There may be difficulties to overcome in resorting to the separation of the ores and in keeping them separate, both underground and at the surface; one of these may arise from the absence of a proper space or accommodation in which to lodge the several classes of ores, so as to preserve the requisite distinction; another difficulty may suggest itself from the present method of having the ores run by the ton, the essence of which, so far as the miner is concerned, would be primary objects. To preserve a distinction between different classes of ore found in the same pitch or stope a higher order of necessity be paid to the men, but the question to be considered is how far the additional expense necessary to be incurred of the ores would conduce to an increase of their yield through the process of dressing. At this point my mind reverts to the remarks of Mr. J. Vivian, that a greater proportional quantity of tin is obtained down that river than by other channels which convey the refuse of other mines, but because so much tin is actually redeemed from river and brought to the market. There must be, I think, a saving employed at the mines generally; and if the Cornish system and it does fail to extract a satisfactory percentage of the tin contained in the ores, there is this to be said in its favour, that the system known could be advantageously substituted for it, and the ingenious contrivances of Germany. Germany has no device less it is a very recent invention, comparable to the set of frames (in number) erected at North Roskear Mine, by the late manager J. Vivian. These frames are specially constructed and adapted to a concentration of fine material particles of tin which float in water, and are held in suspension by almost any appreciable amount of that fluid in motion. They are actuated by a mechanism, in effect in its operation as clock-work, requiring no human hand beginning to end of the process, from one end of the year to the other. They are fed, operated, inverted at the proper time, washed, and re-operated in regular and continuous succession, and effectively as to the results. And yet, strange as it may appear, this age of self-glorification, I do not remember having seen any notice of this exquisite and mechanical arrangement in the *Miner's Journal*, and certainly not elsewhere. I presume its unusual nature was sufficiently content with having successfully performed its duty to his employers.

Appropos of tin stamping, stamps grates, and tin dressing, was at that mine when I was last there, in addition to the stamps and frames I have just been speaking about, a stamps in operation out any grates, for the purpose of reducing the tailings to a fine powder, so that when thus reduced they might be more easily stamped, and the stamps suspended in the water and by its natural motion. The agent who accompanied me over the works informed me it was absolutely necessary to stamp so fine in order to extract tin contained in the stuff, and that information, I am fully convinced, was derived from an experimentally demonstrated fact. I mention these matters for the purpose of showing that the charge, speculation, inattention, and incompetency, rather instigated by some of your correspondents against the management of our leading tin mines in Cornwall, cannot be sustained generally, and also for the purpose of showing that it is absolutely necessary to stamp some of the tinstone so very fine as is now done.

MISE AGES

REVIEW OF MINING FOR THE FIRST PART OF THE YEAR 1875—No. II.

The science of investments to be of any practical use must searching and earnest in its character and application, not only respect to present worth, but also future merits and prospective prospective contraction or expansion from progress or development. The consideration of mining undertakings is no exception to the general rule; they should be thoroughly investigated, and it is for practical authorities to point out concerns that are, though advocated, at the height of their popularity, while they could almost unerring certainty foreshadow their collapse. Again, contrary, they can point out with almost mathematical precision those enterprises which embody the true elements of success, which are worthy of the earnest consideration of capitalists, and the inherent value they possess.

In respect to their positions in October, 1869, we pointed out the decline of West Chiverton and Devon Great Consols, and the position of Dolcoath:—

"The cost of West Chiverton was 30,000, the company consisting of 1000 shares. Through market operations the price advanced to 84, 85, equal to 252,000 the property. The shares in time got distributed, and the value found to be 150,000, paying dividends of 24,000, annually, yet it paid 9000, only, which price stood at 25,000. This mine is now selling for too much, and the price likely gradually to recede over the coming four or five years from inevitable impatient exhaustion at present discernible." The price is now 9½ to 10½ per share, and though the investment was sound and profitable to the original shareholders, still it proved disastrous to the purchasers who embarked on the current of events, for the entire dividends amount only to 157½. Hence the property could never have been intrinsically worth 255,000. We remember, however, the derision and censure which our remarks were received at the time, and we now know that our views were practical, and that our friends were advancing through our suggestions.

Again, in 1869 we alluded to the Devon Great Consols, and referring to its brilliant success, we drew the following picture of its future, and our friends did well through reading, for the has now ceased to make profits, and dividends have been suspended by calls, and for all practical purposes this mine is of no use to the student of the science of investments, whose study should be to serve his capital and to augment his income, with the chance of expansion in regard to the former, and with firm security in the latter. The future of Devon Great Consols is at present as we regarded it in the year 1869:—

"To apply the science of investments to this case we must investigate its position—progressive and prospective. In May, 1868, at Wheal Maria the mine was 200 tons; in May, 1869, 150 tons. At Wheal Fanny they were reduced 1287 to 1090 tons; at Wheal Josiah, from 36,098 to 19,787 tons; at Wheal from 19,379 to 17,290 tons; while at Anna Maria they had increased from 7412 tons to 7412 tons. The results show that the reserves were reduced during the year 1868 to 44,284 tons—or (say) 20,339 tons exhausted in one year, and in value about 9,000, to produce dividends of 36,848, which evidently came from discoveries of ores, but show realisation of reserves, with reduction of credits in hand."

A reference to the share registry will show a strong mixture of widows and spinsters, with a gathering of clergymen, and what recognised as the "drones of society." These require the aid of a practical engineer to keep them aright, for usually, when they flounder about an "aimless" on the surface current of the "Dolcoath Mine" (we observed in October, 1869)—once famous for its copper, and now of tin—is a prize of a century's growth, and, notwithstanding wear and tear of ages, is as firm, expansive, and vigorous as ever. The spring elasticity of manhood is discernible, and the existing company, at the age of 145, as full of prospective promise as ever! The two monthly dividends are 14524 shares—say, 18½, annually, or 14½ 8s. per cent. on the market value of 1287½."

Since this period the shares have been subdivided into 4250, were saleable at 93½ to 100½ each, culminating in dividends last year of 45,645. At present the science of investments would not point to this mine as a desirable purchase. There are elements of risk to induce us to pause in our career. The dividends have fallen off the expenses of working are greatly increased. From time to time we pointed out with success (commencing 25 years ago) the Pool, that rose from 54 to 525½ a share; Buller, 54, up to 1000 a share; Bassett, 50½, up to 800; South Frances, 70½, to 800; North Pool, 15½, to 550; and West Seton, 25½, up to 800; St. Ives Consols, Botallack, Levant, North Roskear, Crofty, Providence, and others were among our choice, and vast numbers that awaited those who followed our suggestions. These have seen their best days of prosperity, and the science of investment points to other progressive undertakings that afford chances of future success with those we have already enumerated. Bampfylde, Zennor, St. Agnes Consols, Aberdunant, South Talcott, East Balleawidder, Phoenix, West Phoenix, New Dolcoath, Looe, Fortescue, and West Godolphin.

Capital should never be protected at the expense of labour.

never that transpires supply will exceed demand. Commercial investments will then fail to yield sufficient profits to cover the ever attendant on business, hence capitalists begin to withdraw, and to hoard it. But to make the most of investment there must be no sloth, no inertness. The investor must inform himself, and act from time to time without that *dolce far niente* which lolls idly upon money bestowed by fortune. Money must not be hoarded like the talent, which having been deposited in the earth like the talent, and found the same as when buried. Apart from personal gain, there is a responsibility in the possession of wealth which should be recognised by the gifted minority. It is well—well—to build a church, to endow a school, to bestow money on hospitals, and the like, but there is another charity, which is more important, or it may be the duty, of superfluous wealth, and that is to promote those classes of enterprise by which the world grows richer, and the needy find bread. Moreover, it is better that the rich, the thrifty, and the naked should learn that the work of the hands and the sweat of their brow find them the means to their own comfort, and that the means to the comfort of others. Mr. George Peabody and Lady Burdett Coutts have made a magnificent charity out of their wealth, but it is still an open question whether, if the same money had been applied in British mining, or extension, and telegraph wires, there might not have been great charity, while the benevolent donors might, in the same way, have at command double the means for charitable purposes. There is something in the condition of humanity in which self-preservation and self-gain are essential elements. If we do our money most advantageously for ourselves we are instinctively and in pursuance of a law of nature, and not the creation of doing what is best for our fellow-creatures. It should further be remembered that it is to our mining interests that the nation owes its existing greatness and its future progress and expansion, and that our trade and commerce be without coals and metals. Homes would be cheerless without fuel, our railways, shipping, and constructive enterprise, and trade languish and expire without iron and other metals and minerals.

The tin trade in Cornwall is in a most unsatisfactory state, and is subject to frequent, and apparently aimless, fluctuations, reminding one forcibly of the vagaries characteristic of the semi-civilized South Sea Islands than the matured and deliberate management of English merchants. These magnates, however, who regulate and control the markets for the products of our tin mines, and who, in the most unscrupulous manner, and with the most complete disregard of the true principles of enlightened commerce, and their fixed determination to keep down the prices of that metal at the very lowest standard, and thus, as far as possible, to cripple enterprise and impoverish the miner. The miners of coal and of iron have not out their strength and command in open competition, and from the influences of monopolies—long exploded in the great markets of production and trade, but regarded in Cornwall as a matter of the vested interests of the county—a fair, honest, and remunerative for their industry, enterprise, and products. The few narrow-minded, plodding, spiritless, non-enterprising fellows who tread in the paths of assumed hereditary rights and privileges, maintaining the antiquated customs of vanquished times, with a fixed opposition to modern reforms and progress, pressing to witness, and most crippling in effect on the interests of the miner, while also their own gains are diminished when compared with what they would become under a more enlightened system of trading. The production of tin in England is not more than 1,000,000 lb. a year, or, at all events, the producers are less. Why is this? The answer is, the smelter regulates the price.

There is a good demand for tin, and a growing consumption; while the production of the whole world does not double the quantity in Cornwall and Devon, and there is no other metal that can compete with it. There is no other substitute for it in the arts, it stands isolated in character, usefulness, and application, and cannot be dispensed with. Why, therefore, should the miner receive the full value? The reasons are manifest. Mining is a monopoly, or, to say the least, a close confederation. The miner has no option but to accept the price offered by the confederation; he may select the member and deal with him, but he regulates the "standard" price. Again, the miner cannot hoard tin, for there is no "pawnbroker," the smelters are generally ready to pledge is worse than to sell, for all must remember the aphorism, "Two to one" against redemption.

That is deemed a combination between miners, and, if possible, the understanding with smelters and consumers. For it is very easy to initiate that the day is not far distant when the standard deep mines must succumb to the costs of labour, fuel, and transport, or we must realise 50 to 75 per cent. advance in the price of tin. There are many who think it an easy commercial matter to advance the price of metallic tin to 200s. a ton, and that fear of any other metal supplanting its use—copper and iron—can be produced in almost any quantities if the market value of the expenditure—not so, however, tin. Cornwall and Devon yield that ore in England, while the whole world cannot produce the quantity. A million sterling would purchase up all the tin in reserve, and, so far as we can judge, all the combined capital of the monopoly, or confederation, put together is far less than that. In the development and working of tin mines in Cornwall there is more than 10,000,000 sterling invested, while 2,000,000 lb. of tin practically command the whole product of the county, and the "vested interest" from the smelter to the producer. Should then see tin 200s. a ton, and no perceptible diminution in consumption. The change referred to would be far less radical and create far less astonishment, than the recent changes in the value of coals and iron. But then, coal and iron are not like tin, they are indigenous to Cornwall. The producers and merchants of the great centres of Wales, the north of England, and Scotland, are men of enlightened business habits. Their enterprise established will never recede back to their normal state three to four years ago, and Cornish tin miners have only to wait their brothers in the Midland Counties and the North to produce a ton for metallic tin. Then Cornish mining will prosper, and we may calculate on a few refreshing prizes to startle and excite the enterprising. The tin smelting of Cornwall requires capital and compass. The confederation does not possess capital to carry on the trade in which they are engaged. They live by gains screwed out of the miner, and fatten when he too starves. The smelter has the ore, he buys it with the miner's pay, for he is usually the miner's banker, and he receives back the price of his ore as soon as it is paid for. Let the miners subvert the 200,000,000, to a bank of their own, keep their own money in their own possession, and sell their ore independently of this anti-Confederation, and then there would be every chance of tin being 200s. a ton.

Minor Tin Mine consists of 1200 shares of 5s. each, and are well the attention of investors. The prospects are good, and as the expense of erection and maintenance of machinery, costs of labour will prove comparatively light, while chances of early profits are prognosticated in the reports of several practical men. The whole purchase-money of this property is only 100,000s., hence there is room for an advance of 200 to 500 per cent., and the commercial value will scarcely compare with the loss of substantial success foreshadowed in the reports. This is a fine concern, and may be held as a permanent investment with the greatest security as regard prospective and permanent yield. St. Agnes Consols, adjoining Wheal Kitty, is a very productive mine, as also is the East Ballewade Mine, in St. Just. This mine has been celebrated for its yield of tin from the remotest times, and its resources are comparatively inexhaustible. It contains 25,000 shares fully paid up, now saleable at 10s. a share, a limited number of which are now for disposal. The mine has been at work about three years, and previously a considerable amount of preparatory work had been effected of great value and of economy of capital to the present company. The subscribed capital is ample for all purposes, as the returns now equal

expenditure, and must from this date result in augmented monthly products. The subjoined points are opening out reserves that cannot for some months be brought into profitable play, yet practical experience can already foreshadow the prospective. At No. 1 level the lode yielding 15 cwt. of silver-lead to the fathom, at No. 2 level 2½ tons a fathom, and No. 3 level 3½ tons of silver-lead a fathom. At this depth a winze shaft has been sunk 14 fms., and a cross-cut extended to the Van lode, which has been developed 30 ft. wide, and the end east is expected to meet the shoot of ore so productive in the shallower levels, and which, from every indication, is likely to yield equally with the same vein in the Van that now returns 500 tons of lead and 200 tons of blende monthly, paying the fortunate shareholders 12,000s. in dividends quarterly on a capital nearly double of that of the Aberdaunt. The present is an opportunity for intending investors to embark, and, probably, an advance will transpire in value equal to its more developed neighbour, in which shares, 4s. 5s. paid, advanced in a few months to 84s., at 86s. each.

The Phoenix and West Phoenix are already referred to, and must be regarded as exempted from the catalogue of speculations. There are certain prizes. West Goldolphin and South Tolcarne are exceedingly promising undertakings, and selling at low prices. Fortesque is spoken well of, and The Lovel paid last year dividends of 120 per cent. on its capital.

The St. Aubyn United Mines comprise the North Grambler and the eastern part of Grambler and St. Aubyn sets. From the back of the adits on the various lodes about 70 tons of tin have been sold. The tinstuff is found in the gossan, of which many thousands of tons have been raised, and which is worked very inexpensively. Several of these lodes produced very rich deposits of copper to the south. The 35 fm. level east, on the north lode, is now producing 4 to 5 tons of rich copper ore per fathom, and is from 2½ to 3 ft. wide. It is in this direction—eastwards—to which all practical authorities have pointed, the geological features pointing to one of those large deposits of copper ore which have been so numerous in Gwennap. Two cross-cuts are being driven south to intersect five or six other lodes. The shares are but 512 in number, and are held in few hands, by original holders. The present returns consist of sales of tinstuff—about 1700 lb. per month. There is now a parcel of copper ore—70 tons—estimated to realise nearly 5000s., which will come to the credit for the present quarter.

R. TREDINICK AND CO.,
Consulting Mining Engineers and Dealers in Shares and Stocks,
32, Fleet-street, London, C.E., April 8.

OUR METALLIFEROUS VEINS.

Sir,—My attention has just been called to a report of the discussion on Capt. Bennett's paper "On Metalliferous Veins," read before the Miners' Association of Cornwall and Devon, that appeared in the Supplement to the Journal of June 28. I presume someone present must have given a report from memory, as I find my later remarks are much misrepresented, and, in some instances, I am made to say the reverse of what I did say. Apart from the granite of the beacon, we have no granite or elvan course from the elvans of Wheal Prudence and Cleggar to the elvan course at South Wheal Ellen, some hundreds of fathoms to the south of Tywarthaile. The object of my remarks was to show that while in some districts Captain Bennett's theory may hold good, in this district other causes—i.e., cross-courses and slides—are the principal factors in the mineralisation of the lodes. Will you kindly insert the accompanying correction in your next paper.

HENRY WHITWORTH, M.D.

St. Agnes, Scourie, Cornwall, July 7.
[Dr. WHITWORTH observed that in St. Agnes the occurrence of cross-courses and slides principally influenced the mineralisation of the lodes. In other districts the influence of cross-courses in the displacement and mineralisation of lodes might also be observed. At Huel Seton, after driving on a small and comparatively unproductive lode, they intersected a cross-course, and found on the other side of it a large rich lode. It was generally supposed they were the parts of one lode, but this was subsequently disproved, as after two years the counterpart of the large rich lode was found on the side originally worked on at a distance of 40 fms. Again, at Treloah, the continuation of the lode and course of ore was found at a distance of 90 fms. on the other side of the cross-course. Nearly all the tin lodes in the north of St. Agnes have a north underlie, and the copper-bearing lodes, north of the Tywarthaile lode, a south underlie. The Tywarthaile lode has a north underlie. The productive lead lodes in the Perran district also have a south underlie.—Capt. BENNETT replied that there was a large elvan course to the south of Tywarthaile.—Dr. WHITWORTH repeated his statement that the underlie of the Tywarthaile lode was north, while the elvan course was considerably to the south of the lode.]

MINING IN MONTGOMERYSHIRE.

Sir,—Under the above heading I find your correspondent "Pedestrian," for some object best known to himself, giving weekly a brief account of some of the mines in the Llanbrynmair district.

In letter No. 2 he—or rather his guide or informant—attributes Rhoysydol Mine being under the shade to the erection of the patent dressing-floors. Now, Mr. Pedestrian, would you and your informant be surprised to hear what has just been told me by one who has known Rhoysydol for the last 25 years—that the mine never presented a better appearance underground than what it does at present, and that the patent self-acting dressing machine has proved a saviour to the mine in dressing its lead ore at a much cheaper rate than the old system that was in use at the Rhoysydol and some of the other mines named by your correspondent; and from what I have heard of them I think that some of the mines that have had some fresh blood introduced into them of late could do no better than get this machinery into their dressing-floors to give that important part of their mine an amount of life that it never had before. And if "Pedestrian" intends to carry on his remarks on mining in this or any other county let him first make sure that what has been told him is truth before he publishes it, and also to keep in his mind that good old English proverb "The proof of the pudding is in the eating of it."—July 7.

CYMRU.

MONTGOMERYSHIRE MINES.

FRONVELLAN.—Noticing in last week's Journal that a communication has been made between the deep adit and winze, I trust that the shareholders will not allow this mine to be trifled with any longer. More energy and management must be displayed here. It is now high time we should look out for regular staples to be opened, and dressing-floors constructed. The great obstacle was the communication; now there is an end of that. Less promises and better returns will be more palatable. Let an experienced man inspect the mine, and draw out an epitome of bargains to be set.

CAE CONROY.—I regret to see this once excellent mine with a downward tendency. I trust a reaction will take place.

CWM NANT DU.—We shall pass, and leave in its invidious state.

CWM BYCHAN.—Here we saw splendid piles of ore on surface. Looking at the mode in which they are dressing, I will say to the shareholders—Do not proceed any further in that manner. Do not be afraid of fixing a crusher, &c. The mine looks healthy, and there has been great perseverance in its development.

RHOYSYDOL.—It is at this mine that the most perfect dressing machinery is to be seen. I question if there is another mine in Great Britain that can produce such machinery.

Remarks on the Dyffell and Dyffwng Mines in my next, as I intend visiting them both to-morrow.

H. W. N.

CAPT. PARKYN'S DISCOVERY OF TIN.

Sir,—Noticing the lucky find of Capt. Parkyn of a rich deposit of tin on one of the lodes of old Lanekett Mine, and knowing it in its palmy copper days, I have, as a well-wisher to persevering men who search and find such valuable discoveries, to ask you to insert my remarks, as I strongly believe that there are more such lodes to be found there yet. Even Capt. Rich, who spent all his days on that mine and never found tin, left the rich lode at home and crossed the river, where, in the short distance of 150 fms., he found and recorded 40 well-defined lodes, all rich in tin. I have no doubt this will give rise to the conjecture as to who will return the most tin, Capt. Parkyn from one lode or Capt. Rich from his 40; it seems to me that 40 lodes are too many. I, however, wish them both good luck through the mine.

St. Columb Doreas, July 8.

CHARLES FOURTH.

EAST POOL AND WHEAL AGAR.

Sir,—To all lovers of fair play the reports of the meeting of the latter mine, and the exposure of the selfish grab policy of some local magnates, must be very gratifying. I am glad to see that Wheal Agar adventurers have taken a stand on their just rights, after paying East Pool 2000s., without any cause or right to do so, for this the committee of East Pool, by their act, now assert. Are they not, as honourable men, bound to return this 2000s., with compound interest, which would now amount to about 10,000s.? Let them follow the example of Zuchew, and I do not think Wheal Agar will ask them for anything. Seeing that Wheal Agar is prejudiced by the acts of Wheal Pool, it is but reasonable and just that the agent

of Wheal Agar should and must take out the dams, if the coincidence of men working in the mines is to be restored, and until this is done the fair labour market is shut to them.

The solution of the difficulty is not great. If the executives of the two mines cannot agree upon terms let them each appoint the best man they can find to whom they shall refer the water question. The remedy to all obstructions is the hands of the Wheal Agar adventurers; let them give due notice, and, if unheeded, no practical authority conversant with the facts will blame them, however much the interests of those who would be benefited by a reciprocal agreement are temporarily prejudiced through the selfish isolation of East Pool adventurers.

Redruth, July 5.

A LOOKER-ON.

CRENVER AND WHEAL ABRAHAM.

Sir,—Passing through or over this mine yesterday the events of "olden times" were brought back to my memory with all the freshness of current events. Looking at the old house, formerly the accountant-house, but now occupied as cottages, I said to a friend who was with me, "In that house about 50 years ago I used to meet the then adventurers at their account meetings frequently, as the representative of a distant shareholder, who if railways had then existed would probably have attended in person. These mines, except that part called South Crenver, ceased to work 50 years ago (1823). South Crenver, worked by a flat-roof and by an engine, stands there the present 90-in. engine stands, was worked till 1825. I believe I attended the final meeting in that year. Nearly all the gentlemen who then present are gone to the 'bourne from which no traveller returns,' but I am enabled to name a few who are still among the living. Messrs. James and Josiah Paul, of Camborne, who were, and I suppose are, interested in the land; Mr. Llewellyn Newton, Camborne, the accountant, who is now in his 89th year, and who walks every day to Tunkinmill Safety Fuse Works, stands at the desk till evening, and then walks back again; Capt. J. Vivian, of North Crofty, South Condurrow, &c.; and Mr. Humphry Pascoe, of Penzance (the son of the late Mr. James Pascoe, solicitor). Amongst the deceased I may name Mr. Henry Harvey, of Hayle, the founder of the extensive works and respected firm of Harvey and Co., who have works also in London and abroad; Mr. Robert Michell, then manager of the works of Sandys, Vivian, and Co., Copper House, now extinct; Mr. Robert Bennett, of Camborne, the agent for Mr. Wm. Harris, of Rosewarne, long since deceased; Capt. Nicholas Richards, the father of the late Capt. Richards, of Clifford Amalgamated Mines, who, I think, was also present; Capt. John Leach and his brother Francis; and Capt. Andrew Vivian, the manager.

In the prosecution of my business I have, of course, seen a vast amount of machinery for working mines, but amongst them all I never saw so much good machinery as is to be seen in these mines. I think that about eight or ten years have elapsed since a company was formed for re-opening these extensive mines, when a contract was entered into between the company and a gentleman whose name I have forgotten, the latter agreeing to supply all the machinery for 60,000s., to include the expense of pumping the mine dry. Before he could complete his contract he found it necessary to borrow money of Messrs. Williams and Co., to the extent of 22,000s., then the company consenting to a mortgage of all the property on the mine as security for repayment. After awhile the Messrs. Williams became the owners of the mines, and continued the works until a company could be formed for carrying them on. It was certainly a bold proceeding on the part of Messrs. Williams, but it turned out well, for the present company on being formed reimbursed them of nearly all their outlay, except what was payable in respect of shares they took and, I believe, still hold in the property. If at the time the late company went out the machinery had been put to the hammer they would have found it necessary to borrow money, a large portion of their advances, machinery at that time being much lower than at present.

The pumping-engines are three in number—90, 80, and 70-in., respectively. There is a man-engine, several steam-whims, &c., all well arranged, and in the very best condition. The sett is over a mile long, and over three-fourths of that length the machinery is distributed. Without looking for ore-floors I saw one on which I observed a good number of girls bucking, and also singing Wesley's hymns in good style. There were several small parcels of copper ore there, some of it of good quality. I am sorry that they have so little mineral to meet the expense of working such extensive mines, but I agree with the advice contained in Captain Tregey's report, that further explorations are justified under the conditions of the mine as detailed by him. He is a very intelligent mine agent, and so is Capt. Kitto, the manager, who is a son of a worthy agent who was under the Messrs. Williams and Co. more than 50 years—a good man, under the best of masters.

I wish to correct a common error with respect to these mines. It has been generally believed that they yielded a clear profit of about 200,000s. Such was not the case. The old company did divide that sum, but before that was done they had expended the same or about the same amount, so that the returns merely reimbursed their previous outlay. Capt. Nicholas Vivian, who was an agent there, gave me to enclose you for insertion in the *Mining Journal* of this week some extracts from the reports made by the late Mr. F. Pryor on behalf of Mr. J. G. Tyrie, a large shareholder and director of the Drake Walls Mine. Mr. Pryor, in closing his report, states, "The bottom levels—80, 90 and 102, at Matthias's shaft—are all hard and unproductive, and have been so for some time past. The same may be said of the three bottom levels at the engine-shaft, in which the rock is unusually hard and not congenial for mineral. I am convinced you are wasting capital in driving those worthless levels and laying down any machinery to work over the old elvans—i.e., old burrows. Therefore, I again advise you to discontinue such interest, evidently the mine has much fallen off." The secretary writes me, "I have been favoured with a sight and perusal of Mr. Francis Pryor's report on Drake Walls to Mr. Tyrie, as a private document. You will, in my opinion, be quite right in suspending those unproductive points and erections, and reduce costs as much as possible.—H. W., Secretary."

THOS. GREGORY.

Treviso, July 9.

DRAKE WALLS MINE.

Sir,—Having received several enquiries from friends at a distance as to the actual value (if any) of the bottom levels of this mine when operations were suspended, I beg to enclose you for insertion in the *Mining Journal* of this week some extracts from the reports made by the late Mr. F. Pryor on behalf of Mr. J. G. Tyrie, a large shareholder and director of the Drake Walls Mine. Mr. Pryor, in closing his report, states, "The bottom levels—80, 90 and 102, at Matthias's shaft—are all hard and unproductive, and have been so for some time past. The same may be said of the three bottom levels at the engine-shaft, in which the rock is unusually hard and not congenial for mineral. I am convinced you are wasting capital in driving those worthless levels and laying down any machinery to work over the old elvans—i.e., old burrows. Therefore, I again advise you to discontinue such interest, evidently the mine has much fallen off." The secretary writes me, "I have been favoured with a sight and perusal of Mr. Francis Pryor's report on Drake Walls to Mr. Tyrie, as a private document. You will, in my opinion, be quite right in suspending those unproductive points and erections, and reduce costs as much as possible.—H. W., Secretary."

THOS. GREGORY.

[For remainder of Original Correspondence see to-day's Journal.]

THE NEW FOWEY CONSOLS TIN AND COPPER MINE.

NEAR ST. BLAZEY, CORNWALL.

July 5.—The area of the sett is nearly 1 mile square, therefore practically inexhaustible. There are four tin lodes, and four copper lodes in the sett. The tin lodes have been neglected for many years, as the copper lodes in Old Fowey Consols Mine were found to be very rich, and yielded immense quantities of copper ore, and it has been said the mine paid upwards of a million of money to the shareholders. This, no doubt, will partly account for the neglect of the tin. These lodes are side or parallel lodes to the rich copper lodes of the Old Fowey Consols, and were at a distance of only 100 fathoms, while the copper lodes mentioned in this report have been wrought on east, and thousands of tons of copper ore have been raised, and it appears that these copper lodes yield tin west of the cross-course; this cross-course is a most important feature, as the copper ore was found in abundance around and about it in the old mine; in fact, it really made them productive, and the tin lodes in the New Fowey Consols, both east and west of this cross-course, are very rich indeed, and I do not see any reason why the tin lodes should not prove as productive in the New Fowey Consols as the copper lodes did in Old Fowey Consols, and from the rich lodes laid open I think that they will be found so; indications warrant this opinion. The mine is situated on a hill, and can be worked for years by means of an adit level, the deepest will be 60 fathoms, but 20 fathoms would soon be obtained by driving a level on the course of the middle tin lode, while all the other lodes can be easily cross-cut from this lode as a good depth. Another important feature in this mine is that water-power can be had for stamping the tinstone, thus a great saving will be effected from that of steam-power, and the tinstone can be trammed direct from the different lodes into the stamps, thus to a great saving over winding the ore from deep shafts. The sett certainly is a most valuable one, and is in one of the richest districts in Cornwall for tin and copper ore, as nearly all the mines in this district have paid large profits to the shareholders.

The mine is distant 1 mile from Par Station, and the turnpike-road passes through the sett, going from St. Blaizey to Lostwithiel. The middle lode now exposed to view is 2 feet wide, and contains 2 cwt. of tin to the ton of lodestuff, which is far above the average of the county, and is near to the Old Fowey Consols cross-course, and no doubt large quantities of tin will be found in all these tin lodes when laid open. I would recommend at once to clear out an old adit at the foot of the hill, which is said to have been driven 50 years ago, as by doing this you would be able at once to drive east on the middle lode, when I am persuaded a valuable mine would at once be laid open. I beg to refer to the plan of the mine, which will show the position of the mine, lodes, &c., also the depth the adit level will intersect the lodes. In conclusion, I will sum up a few particulars, to which I invite special attention, as in my opinion too much stress can scarcely be put upon them. The property is situated in one of the richest mineral districts in Cornwall. The lodes are in the closest proximity with and parallel to those which, in the adjoining sett, Old Fowey Consols, returned nearly a million sterling profits. The cross-course, which made the mine above referred to, is found as there in this property; the sure sign and cause of wealth, and thus securing also the same peculiarly favourable geological formation. The mine can be prosecuted to a depth of 60 fathoms without the aid of steam-power, either for pumping the water or stamping the lodestuff; such facts need no comment. Looking at the mine in all its bearings, I find no difficulty in saying that I think it is one of the best and safest investments I have ever seen.—THOMAS PARKYN.

SPECIFIC PERFORMANCE—MINING CONTRACT—DELAY.—*Hutchinson v. Lovelidge*, L.C. for M.R. 21 Weekly Reporter, 570. The rule that a party seeking specific performance must show due diligence (*Southam v. Bishop of Exeter*, 11 Hare 213), is well illustrated by the above decision, by which a demurrer was allowed to a bill for specific performance on the sole ground of a delay of five months in filing the bill after the parties were put at arms' length. It should be observed, however, that the contract was for the lease of a colliery, and it betrays those who seek specific performance of agreements relating to commodities fluctuating from day to day in their market price to be unusually vigilant and active in asserting their rights (*Prendergast v. Turton*, 1 Y. & C.C. 88, see p. 110). Indeed, in these cases, time, even though not named, is, from the fluctuating nature of the property, of the essence of the contract (*Whitby v. McGregor*, 13 Hare 553, 5 W.R. Ch. Dig. 166). No general rule as to what is a reasonable time can be laid down; but in cases of this description a purchaser cannot be too prompt.—*Solicitors' Journal*.

ISSUE OF £50,000, (BALANCE OF £120,000.)

PERPETUAL FIVE PER CENT. DEBENTURE STOCK OF THE EXTENSION TO THE MIDLAND RAILWAY OF THE SOMERSET AND DORSET RAILWAY COMPANY.

The directors of the Somerset and Dorset Railway Company are prepared to receive subscriptions for £50,000, being the unpaid balance of the £120,000 of perpetual five per cent. debenture stock, in sums of £100 and upwards. This debenture stock is secured upon the extension to the Midland Railway at Bath, authorised by the Act of Parliament, 34 and 35 Vic., cap. 205, and the interest is payable out of the gross receipts of that extension, as hereafter mentioned.

The whole of the share capital, £300,000 (which is entitled to dividend only after the interest on the debenture stock now offered is fully paid), is subscribed, and upwards of £200,000 are paid up.

The line, as will be seen by the accompanying report of the resident engineer, is in a very forward state, and will be opened for public traffic at the end of the year.

The existing line, opened and in work, is 66 miles in length, and the extension to Bath is about 26 miles, making a total of 92 miles.

Special advantages are secured to the extension capital by the terms of the Act of Parliament, under which the existing line is charged, not only with the payment of its own working expenses, but also with the working expenses of the extension line, and (together with the extension line) with an annual charge of £17,000.

The gross receipts of the extension line are, therefore, available (subject to the above) for payment, in priority to all other interest or dividend, of the interest at 5 per cent. on the extension debenture stock, which amounts to £2500 per annum only, or less than 45 pence per mile per week, while the estimated traffic amounts to £35 per mile per week.

Applications, accompanied by a deposit of £10 per cent. on the amount of debenture stock applied for, should be forwarded either to the bankers, Messrs. Roberts, Lubbock, and Co., 15, Lombard-street, E.C., London; Stuckey's Banking Company, Glastonbury; or to the managing director, at the London offices of the company, 16, Parliament-street, Westminster, S.W.

The balance will be payable on demand.

The Debenture Stock will be registered in the names of the applicants free of expense.

If no allotment is made, the deposit will be forthwith returned in full.

The interest at 5 per cent. commences from the date of payment of the money to the credit of the company, and is payable half yearly in London, in the months of April and October.

CHARLES WARRING, Chairman.

ROBERT A. READ, Managing Director.

London Offices:

16, Parliament-street, Westminster, S.W.,

July 1, 1873.

TO THE CHAIRMAN AND DIRECTORS OF THE SOMERSET AND DORSET RAILWAY.

GENTLEMEN,—In accordance with your instructions I beg to submit to you my report of the position of the works of this railway:—

Of the tunnelling, about 1½ mile in all, three-fourths are completed, and the remainder is being pushed forward day and night.

Of the masonry in bridges and viaducts, and of the earthworks, upwards of one-half is completed, and the remainder is in rapid progress.

The whole of the materials for the permanent way are purchased, and in course of delivery, and one-fourth already laid.

The entire undertaking, therefore, is in a very forward state, and the contractors have a staff of 2000 men, five locomotives, 70 horses, with other appliances employed on the work, and they are using every means for completing the railway by the end of the year.

I am, Gentlemen,

Your obedient servant,

F. G. SLESSOR,

Engineer's Office, 26th June, 1873.

Resident Engineer.

MANN'S RAILWAY SLEEPING CARRIAGE COMPANY (LIMITED).

Incorporated under "The Companies Acts, 1862 and 1867," with

limited liability.

Capital £200,000.

In 19,700 Preferred Shares of £10 each, and 3000 Deferred Shares of £1 each.

First Issue, 10,000 Preferred Shares and 3000 Deferred Shares.

7000 of these £10 per cent. Preferred Shares are now offered to the public at par.

The Preferred Shares will be entitled to receive out of the net profits of the company in each year, after providing for expenses of management, and for the formation of a reserve fund, a Preferential Dividend for that year of £10 per cent., and are, upon being fully paid up, redeemable by annual drawings at 45 pence per share, commencing in 1875.

The Deferred Shares will receive no dividend whatever in any year until £10 per cent. for that year shall have been paid on the Preferred Shares, and the prescribed sum mentioned below shall have been appropriated in that year, commencing with the year ending June 30, 1875, to the redemption of the Preferred Shares. The sum to be so appropriated in each year (but subject to the payment of the dividend for that year on the Preferred Shares) is £1000 in the first year, £2000 in the second, £3000 in the third, and so on increasing by £1000 in each year.

The Deferred Shares will receive all the surplus profits after meeting the various payments provided for above.

Installments to be paid as follows:—

£1 per share on application; £4 per share on allotment; £2 10s. per share on the 1st October, 1873.

The balance as required not earlier than the 1st December, 1873.

DIRECTORS.

J. S. FORBES, Esq., 6, Westminster-chambers, Victoria-street, S.W.,

Vice-President of the Dutch-Rhenish Railway Company.

WILLIAM EVANS, Esq., 22, Cornwall-gardens, South Kensington,

Vice-Chairman of the Dublin and Drogheda Railway Company.

RICHARD SHAW, Esq., M.P., 114, Queen's Gate, South Kensington.

COLONEL WM. D'ALTON MANN, U.S.A., Engineer, 11, Old

Broad-street, E.C.

Mr. GEORGES NAGELMACKERS, Liège, Belgium.

BANKERS.

Messrs. WILLIAMS, DEACON, and CO., 20, Birch-lane, Cornhill, E.C.

LICITORS.

Messrs. U'FON, JOHNSON, UPTON, and BUDD, 20, Austinfriars,

Old Broad-street, E.C.

BROKERS.—Messrs. J. and A. SCRIMGEOUR, 18, Old Broad-street, E.C.

SECRETARY (pro tem.)—CHARLES JOHN ADAMS, Esq.

OFFICES—40, GRACECHURCH STREET, E.C.

PROSPECTUS.

This company is formed for the purpose of constructing, maintaining, and running sleeping carriages on any and all railway lines in Europe with which contracts are or shall be made.

In furtherance of this object the agreement hereinafter mentioned has been made to purchase and acquire:—

1. All the patents for sleeping and bondoir carriages taken out and held by Colonel William D'Alton Mann throughout Europe, together with the carriages now being constructed and nearly completed for him.

2. The patent in France for sleeping carriages taken out by Georges Nagelmackers, and all the material and rolling stock constructed and being constructed for Georges Nagelmackers and Co., of Liège.

3. The benefit of all the concessions and provisional contracts obtained and negotiated for by both Colonel Mann and Messrs. Nagelmackers and Co., for the purpose of working railway sleeping carriages, including the provisional contracts mentioned in a schedule to the said agreement.

There are included in the purchase, Colonel Mann's patents for Great Britain and Ireland, France, Spain, Belgium, Italy, Austria, and Russia, and the benefit of applications for patents for Bavaria, Saxony, Norway, and Sweden.

The purchase-money for all the above property, patents, concessions, rolling stock and contracts is to consist of £20,000 in cash and 3000 Preferred Shares of £10 each, and 3000 Deferred Shares of £1 each.

The concessions acquired by this purchase comprise provisional contracts already duly entered into with the several railway lines constituting the following great through routes on the Continent.

From Calais and Boulogne to Paris.

From Calais to Berlin, via Brussels.

From Paris to Cologne.

From Paris to Brussels.

From Ostend, via Brussels, to Berlin.

From Ostend to Cologne.

From Paris to Vienna, via Strasbourg.

And negotiations are pending with the administrations of other leading lines of railway.

These concessions are provisional; at the end of the respective provisional periods, ulterior arrangements are to be made in manner indicated by the respective contracts.

A large number of additional sleeping carriages are immediately required for the routes under contract, as above mentioned, and the number will be continually increased as the use of sleeping carriages in Europe becomes habitual, and night travelling increases accordingly, as experience in America during the last 10 years shows it does to a wonderful extent.

The basis on which the business is conducted, and on which the existing contracts are made, is as follows:—

This company will own and manage the sleeping carriages—placing a conductor in charge of each—and keep the inside in order, the railway company keeping the outside of the carriage and the wheels and axles in repair, furnishing oil, fuel, and lights. The railway companies haul the carriages, receiving the ordinary fares for each passenger; while the sleeping carriage company receives a supplement or additional price from each passenger for use of the beds, linen, lavatories, &c.

The great luxury of sleeping carriages, which has been so long enjoyed in America, is demanded by the travelling public in Europe. Experience in America has proved that this can best be accomplished by a special organisation or company, directing its energies and attention to this particular class of rolling stock, thus securing the highest type of comfort and luxury in the carriages, and a uniform and thoroughly disciplined service throughout. This is rendered almost absolutely essential when the carriages are to be employed on long through routes, running over the lines of several railway companies, where necessarily the greatest irregularities and inconveniences would occur if by the sleeping carriage service were undertaken by the several different lines, or by a joint combination of several managements, with often diverse and conflicting interests.

The system of sleeping carriages patented by Colonel Mann, and acquired by this company, has been designed especially to meet the material conditions of railways

in Europe, and to suit the tastes of the European public. It has met with general favour from engineers, railway managers, and the press.

The directors would call attention to the illustrations and extracts from the leading article of the scientific journal, "Engineering," of the 15th April, 1873, enclosed herewith.

The agreement herebefore referred to for the purchase is dated the 3rd day of July, 1873, and is made between William D'Alton Mann of the first part; Georges Nagelmackers of the second part; the said William D'Alton Mann and Alfred Maddick of the third part; and Charles John Adams, as trustee for and on behalf of this company, of the fourth part.

Copies of the Memorandum and Articles of Association, and the above-mentioned agreement, the documents relating to the various patents, and the original documents relating to the concessions from the continental railway administrations, can be inspected at the offices of the solicitors of this company.

Applications for the Preferred Shares should be sent to the company's bankers, Messrs. Williams, Deacon, and Co., 20, Birch-lane, E.C.

The deposit will be returned in full if no allotment is made, and if an allotment is made, will be applied on account of the amount payable on the shares allotted.

Prospectuses and Forms of Application for shares may be obtained from the bankers, the brokers, and at the offices of the company.

MANN'S RAILWAY SLEEPING CARRIAGE COMPANY (LIMITED).

FORM OF APPLICATION.

To be retained by the Bankers.

To the Directors of MANN'S RAILWAY SLEEPING CARRIAGE COMPANY (LIMITED).

GENTLEMEN,—Having paid to your bankers the sum of £ being a deposit of £1 per share, I request that you will allot me Preferred Shares of £10 each in your company, up to the terms of the Prospectus and Memorandum and Articles of Association; and I hereby agree to accept the said shares, or any smaller number which you may allot me, and I agree to make the payments thereon at the times specified in the Prospectus, and to become a member of the company; and I request you to place my name on the register of members in respect of the shares which may be allotted to me.

Name in full _____

Date _____ 1873 Address in full _____

By order, C. J. ADAMS, Secretary (pro tem.)

40, Gracechurch-street, London, E.C.

THE PATENT SELF-ACTING MINERAL DRESSING MACHINE COMPANY (LIMITED).

T. CURRIE GREGORY, C.E., F.G.S.

OFFICES,—62, ST. VINCENT STREET, GLASGOW.

This company grant licenses, under their patents, for the use, singly or in combination, of the most approved machinery for dressing ores, comprising Stampers, Jiggers, Classifiers, and Buddies.

Mr. GEORGE GREEN, the company's engineer, will exhibit the machinery in full work, and enter into contracts for the erection of the whole, including his Patent Self-acting and Classifying Process, which is indispensable for the effective working of Self-acting Jiggers.

He has completed arrangements at Aberystwyth, whereby he is able to supply and erect all at the lowest possible cost.

The following testimonials will be satisfactory:—

FROM THE GREENSIDE MINE COMPANY, PATTERDALE, WESTMORELAND.

Patterdale, near Penrith, October 2nd, 1872.

DEAR SIR,—The patent jiggers, which you have erected at Greenside Mine, are giving great satisfaction. The separation which they make is complete. Your arrangement for self-feeding and classifying is the main step towards effective working, and is well designed. The saving both in ore and labour will please everyone, and there is no doubt that the new system must supersede the old in all places where these advantages are desired.

GREENSIDE MINE COMPANY, (per T. TAYLOR.)

FROM CAPT. HENRY TYACK, M.E., EAGLE BROOK MINE, CARDIGANSHIRE.

Eagle Brook Mine, December 25th, 1872.

SIR,—I have minutely inspected the Patent self-acting Dressing Machinery you have erected at the Great Lode and Bodello Mines. I do not hesitate to say that it is by far the most perfect machinery for the purpose I ever saw. The self-acting arrangement is complete, no labour being required to obtain a clean product from the crusher, under the very finest granular particles, while the slimes are conveyed direct to the buddies without settling pits. The system must save at least two-thirds of the entire labour cost, and a considerable amount of ore, which would otherwise be lost, and will, most certainly, be adopted where these considerations are an object.

HENRY TYACK.

Mr. George Green, Mining Engineer, Aberystwyth.

GOLD AND SILVER MINING COMPANIES

CAN BE SUPPLIED WITH

RICKARD'S PATENT AMALGAMATING CONCENTRATORS.

For the REDUCTION OF GOLD AND SILVER ORES, SLIMES, TAILINGS, CALCAREOUS, ARGILLACEOUS, and other LIGHT GANGUES, having a tendency to CARRY OFF FLOAT GOLD, FLOURED AMALGAM, QUICK SILVER, and PRECIOUS METALS, which resist amalgamation by all methods of treatment hitherto in use; and for CONCENTRATING SULPHIDES simultaneously with recovery of MERCURY and AMALGAM from TAILINGS.

Apply to—

MR. JOHN A. ILBERY,

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Where a Working Model may be seen, and all particulars obtained.

Latest results have extracted 97.8 per cent. of assay contents of gold quartz, and 69 per cent of silver from tailings rejected by a noted silver mine in the United States.

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ESTABLISHED MORE THAN HALF A CENTURY,

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Who are in a position to MANUFACTURE ALL KINDS OF ENGINEERING

AND FOUNDRY WORK, SHOVELS, and MINING TOOLS of every

description; and have had a large experience in preparing

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THE JOURNAL OF THE IRON AND STEEL INSTITUTE,

containing Proceedings of the Institute; Original Communications bearing upon matters connected with the Iron and Steel Trades; Reports on the Progress of the Iron and Steel Industries in Foreign Parts, by the Foreign Secretary (Mr. DAVID FORBES, F.R.S.); Notes on the British Iron and Steel Trades; Statistical Information, &c., &c.

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Nine numbers have been issued, and all, except No. 1. (1871), which is out of print, can be supplied. The next number of the Journal will be published in a short time.

JNO. JONES, General Secretary.

Royal Exchange, Middlesbrough, May 22, 1873.

Just published (price 5s., by post 5s. 6d.),

THE MULTUM IN PARVO

ILLUSTRATED LIST OF

HEAVY IRON AND STEEL TRADES,

RAILWAY PLANT, TOOLS, &c.,

Containing Engravings of Railway Plant; Engineers', Iron Shipbuilders', Contractors', Plate-layers', Colliery and Mining Tools, &c., &c.

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HIGH STREET, SHEFFIELD.

THE LIVERPOOL COLLEGE OF CHEMISTRY,

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Within one month more than 500 tons of the best red hematite iron ore have

been shipped from these mines to Cumberland at a profit of £1 per ton.

At this rate, even with the present very inadequate appliances, and after payment of office expenses, a profit of £10 per cent. per annum on the whole £250,000 nominal capital of the company, is shown; but not even two-fifths of such profit have yet been obtained, the red hematite of Cumberland.

If one-fifth more of the capital were now to be judiciously expended, the profit in sight and ready to be raised would increase the profit to nearer 50 per cent. annum, and in addition would enable the directors to sink at once upon a very

copper lode, which even at the surface yields numerous stones of copper estimated to be very valuable, the copper being of the richest quality.

Extent of mining sites, 935 acres.

Dhrynane Lodes, analysed by Fred. Claudet, Esq., Assayer to the Bank of England:—75 Per cent. of metallic iron, 62.00. This ore is of very good quality and resembles in composition the red hematite of Cumberland.

Ballaorra Lodes, analysed by Henry M. Nod, Esq., Ph.D., F.R.S.:—Iron ore, 61.34. An iron ore of first-rate excellence.

THE SHARE LIST WILL SHORTLY CLOSE.

Registered Office, 30, John-street, Bedford-row, W.C.

MAUGHOLD-HEAD.—During the last week the mines have been

visited by several of the directors of the company from London, accompanied by Mr. J. R. MacArthur, the solicitor, and Capt. Rowe; and a thorough examination of the whole of the company's property has been made, the directors and MacArthur going underground throughout the whole of the extensive levels

at Ballaorra and Dhrynane. Powerful machinery is about to be erected, and determined to work the hematite iron lodes with a greater vigour than has ever been before; and the great copper lode at Maughold-Head is to be opened and worked with all the proper appliances. Within the last few weeks upwards of 500 tons of iron ore have been shipped from these mines, and other vessels are being loaded. Heavy anchors and moorings are about to be put down at Port Dinorwic, which will render the company's shipping place there lately erected a more and commodious place for vessels to receive their cargoes of ore.—*Id. of Man*

ST. BLAZEY CONSOLS.—This mine was formally opened on the 1st day, and the directors, the chief of whom reside in London, celebrated the occasion by a dinner, provided by Capt. Rich. Mr. Gardner, Chairman of the mine, presided, supported by Sir Colman Rasleigh, the Rev. J. Peniston (Vicar of Blazey), and Messrs. J. H. Greene, W. S. Mappin, H. Dunham, and O. D. Mappin, and other gentlemen. After dinner speeches and toasts were given, the tone of each speech was indicative of confidence in the mine, and of the results to the adventurers. The Chairman, who is a practical miner, and carefully into details, and Sir Colman Rasleigh frankly stated that he was to profit from the disadvantage of others, but as lord of the manor he was interested in the success of the enterprise, and felt satisfied that the company's mine had not been over-estimated. The Vicar of St. Blaze, in returning for the toast of his health, stated that, living as he did amongst a mining population, and conversing with all kinds of persons, he had never heard a criticism on the undertaking, and expressed his ardent hope for its success. The engine was set to work by Mr. Eustice, to the satisfaction of the company. Capt. Rich was highly eulogised. The engine is named, after Lady Geraldine Rasleigh.

EAST WHEAL UNY.—The sett, machinery, and materials have been sold to Messrs. Crawshaw, of Gloucester, for £2000. It is stated that the mine intend to further develop the mine

Meetings of Public Companies.

EBERHARDT AND AURORA MINING COMPANY.

The ordinary general meeting of the shareholders was held on Tuesday, at the City Terminus Hotel, Cannon-street, Mr. A. D. DE PASS in the chair.

Mr. ALFRED CRITCHETT (the secretary) read the notice convening the meeting. The report of the directors was considered as read. The CHAIRMAN, in proceeding to comment upon the report and the accounts now before the meeting, said that his remarks upon the accounts would be very brief. In the first place, he might mention the fact that the company had sustained that unfortunate disaster—the burning of the International Mill. As to the various losses and losses through which they had subsequently passed, there was not, he thought, any necessity for him to describe. Suffice it to say that the result of their revenue account for the six months ending 31st December last showed the small loss of only 471s. 7s. 3d., and that would not have been the case but for the fact that they had had to write off, of something like 4000l. to 5000l., as very large sum for ore said to be on the dump, but which the directors had subsequently ascertained was not of the value fixed by them, and they had at once written off the accounts. Now, if it had not been for that fact, instead of the loss of 470l. there would have been a profit of something like 5100l. Passing on from that subject, the Chairman observed that the result of the loss of the International Mill to the company, for which they were insured to the extent of 33,500l., would be explained to the shareholders thus:—The value, or rather what they called the value, or cost to the company of the mill and its effects would amount to 44,000l.; but if they would carry their memories back to the time when he had addressed them in April or May, twelve months since, they would remember he had informed them that the company had of necessity become its own insurers, because they could not find companies of sufficient solidity to undertake the whole of the liability. Thus the policies they had been enabled to effect amounted to 33,500l., leaving something like 11,000l. of nominal value belonging to the company totally uninsured. Now, in this matter of the destruction of the mill by fire, there were many shareholders who apprehended that this company had received 33,500l. in full in cash, but such was not the case, for in the first place regard must be had to the charge in respect to machinery and stores, which had been estimated at the company's agents, resident on the spot, at 20,000l. Consequently the sum to be received by this company amounted to only 12,900l., which they had received, with the exception of 1800l. That sum, he was sorry to say, remained uncollected, and it would be a matter of some doubt whether it was ever collected in full, inasmuch as some of the companies in which they were insured had suffered at the same time very heavy losses in the conflagrations at Chicago and elsewhere. However, the practical result was simply this:—They had received in cash only the sum of 11,000l., in addition to which they had assets which had been estimated of the value of 10,000l. in the shape of stores and machinery; and he might here mention the intention of the directors to utilise that salvage in the erection of another mill. Now, had the company to erect a mill entirely from its foundation there was very little doubt but that the cost would amount to about 25,000l. He wished it to be clearly understood that he was, of course, speaking in round terms in making such statements as these, because it was impossible to estimate very closely the cost of any works to be undertaken in so distant a country as Nevada. Now, he repeated, the erection of a 30-stamp mill—for that was the number of heads they proposed putting up—would probably cost 25,000l., but by utilising stores and machinery saved from the fire the directors had every reason to believe that the cost to the company would be only 9000l.—and that considerable saving would be effected by bringing the debris of the fire into use. (Hear, hear.) Then the next matter he desired to touch upon was with respect to the amount of profit that they had realised since Dec. 31, 1872—that was to say, from Jan. 1 this year, and he desired more particularly to do this because the date to which accounts now before the meeting were made up was very late indeed, although it was solely owing to the occurrence of circumstances quite beyond the control of the directors that the accounts had not been submitted to the consideration of the shareholders at an earlier date. Now, from Jan. 1, 1873, there had been a considerable improvement in the affairs of the company, and the last two months had produced a profit of 9000l., in round figures, from the mining which had been going forward at the Stanford Mill, and the company had had a mill of their own there would have been further saving—for they had crushed 3400 tons—of 2500l. He wished particularly to call their attention to this point, because he would have the shareholders bear in mind that when the company were in possession of a mill of their own they would save the very considerable outlay now incurred in crushing by another company. Now, in regard to the position of the mines, there was no doubt that many of the proprietors would be looking to him for some explanation in regard to the position and prospects of their mines. Now, if the gentlemen present would recall the words he had employed when he had addressed the shareholders on previous occasions, they would remember that he had been extremely careful in giving his opinion as to the position and prospects of this undertaking. He had given them his faith and hopes, but he had at all times been very careful as to any opinion he expressed regarding the company's affairs; for the board had naturally been obliged to demand upon the information received from agents and others at the mine, and could form no independent opinion from personal experience. All the information thus received had been forwarded to the proprietors in due course, and he did not think he could do better than refer them to those documents. He might add, while upon this subject, that one of the directors (Mr. Fearless) had recently written out to Nevada, and he was glad to say his colleague spoke very hopefully of the concern. The board also shared this view of the company's future, and entertained a firm conviction that the mines were very valuable; and that there must be something in such a belief as was evident from the amount of silver already extracted and the promising appearance of their present workings. But to say more as to the anticipations entertained by the directors with regard to the company's future would possibly have the effect of raising over-optimistic hopes in the minds of the shareholders; he would, therefore, content himself with simply stating facts, from which they might draw their own inferences. All he would venture to say was that the board, as a body, felt tolerably hopeful and tolerably certain as men could do, that the company possessed a really valuable property out in Nevada. But, at the same time, there was no telling the proprietors that they had come upon a permanent ore channel, which was the distinguishing feature that made such properties as theirs so valuable; but this he might state, and it was a fact that they had gone down in depth the ore ground increased in richness and permanency. (Hear, hear.) They had not, however, come upon that ore channel which the proprietors at large, and he himself, had anticipated to meet with when they had invested their money in this undertaking. As to any further information, he might mention that the manager had telegraphed to the board only within the last week that "the mines are looking exceedingly well." He added that he had taken out during the last month a considerable number of tons, and that each ton had produced something like 870; and, perhaps, what was of more importance, that as they proceeded in depth the ore continued to improve in quality, and to be of a more regular and certain quantity than they found it in the earlier chambers of the mine. Now, passing on from that matter he came to another feature, and he approached it with a great deal of caution, and he wished to use a great deal of circumspection while dealing with this subject—that was with respect to the change in the management of the company's affairs out in Nevada. It had long been a subject of dispute between many of the shareholders and the board, or rather some members of the board, as to whether the management of this company was in the hands of the right men. He, for one, begged at once to state that he had had reason to change his opinion in regard to this ques-

tion; and, as he had told the shareholders before, whenever he found he had been in the wrong he would frankly own his error. (Hear, hear.) At the same time he would observe he, in common with his colleagues, had only acted in the interests of the Eberhardt Company from the very first; and, although they might have acted wrongly, they had pursued that course which according to their knowledge and judgment had appeared at the time best suited to promote the best interests of the shareholders. Nor had they neglected to bring every information to bear with the view of seeing that they had not only a manager who by his ability was competent to manage the property, but who by his undoubted integrity would enable them to go to their beds in perfect safety, feeling assured that they had entrusted the control of their affairs to one who would regard their interests as his own. And he had confessed he had thought the company had found such a manager in Mr. Phillpotts; but, as subsequent events had shown, in this the directors had been sadly mistaken. Now, the gentlemen present would naturally ask why he (the Chairman) above all had seen cause to change that opinion. Well, in order to do that it was necessary that he should go back to the time of their last meeting. It would be in the memory of the shareholders that the board, as then stated, had agreed to a truce, if it might be so termed, that they should be united, provided Mr. Phillpotts appeared in England to render to them an explanation of his management of the company's affairs in Nevada. He desired the meeting to bear that position of things in mind. Such had been the agreement he had laid before the proprietors on the last occasion they had met. That had been the distinct understanding between all parties, and he believed the meeting, or at least the majority of the meeting, had assented to it. Well, in accordance with that agreement, the board had telegraphed to Mr. Phillpotts, requesting him to make his appearance in England, and, considering that as the mill was destroyed there was very little to do on the property, to do so in the shortest possible space of time. In reply the board had received a telegram from Mr. Phillpotts in which he had fixed the date of his visit at a longer time than he (the Chairman) had liked. Nevertheless, he had said he would be prepared at a certain time to come over to this country, and they (the directors) had gone on waiting for him. About this time another gentleman had made his appearance upon the scene, and that had been Capt. Drake, their present managing director. Capt. Drake, they must bear in mind, had been one of the original holders of this property, and one who had worked the mines successfully when he had been part proprietor of them, and one whom the board had no hesitation in seeing and consulting with upon the position and prospects of their property out in Nevada. He was bound to add that, personally, Capt. Drake had taken his fancy; he had already made himself known to several of his colleagues at the board, and they also had thought very favourably of him. Now, seeing that the board was deficient in what he might term mining intellect, and having regard, also, to the fact that in Capt. Drake they (the directors) found a gentleman and an able man of business, and well versed in mining matters, they had invited him to a seat at their board, thinking that nothing could be carrying out their understanding with the shareholders more truthfully and correctly than that they should not neglect one single source of gaining information as to their properties in Nevada. (Hear, hear.) Capt. Drake, very honourably, and in a manner that met with the approval of the board, had stated that he had no desire whatever to be the means of causing Mr. Phillpotts to retire from the office of manager of the company's affairs. And it had been under those circumstances, and with that understanding, that he (Capt. Drake) had joined the board. Now, but a very little time had elapsed since that appointment before they had ascertained that there were a great many matters connected with the working of the mines of which Mr. Phillpotts had given them no information. Such a revelation had led them to go into the matter more closely, and upon thoroughly investigating the company's position with Captain Drake, the directors had seen reason to request him and Mr. Fearless to go out to Nevada, where they might make an investigation into the company's affairs much quicker, more accurately, and more effectually than could possibly be done at home. The result of that step had been, as they were aware, the appointment of Capt. Drake as managing director of the affairs of the company in Nevada, and the retirement of Mr. Phillpotts. (Hear, hear.) He did not think that he had anything more to add upon that subject; indeed, he was of opinion the company would in no way be benefited by raising a discussion upon and entering in detail into the question of Mr. Phillpotts' late management of their affairs. And although experience had proved that the directors had been wrong in their estimation of Mr. Phillpotts' character, he still thought they were entitled to forbearance and consideration. (Hear, hear.) Now, it so happened that the operations during the latter part of last year were a matter of little importance to the company, from the fact that the loss of the International Mill had greatly limited the amount of work executed. Thus the control of their affairs by an incompetent manager had not caused so great a loss as might otherwise have been the case. Again, although it had appeared at the time a great misfortune, subsequent experience had shown that the loss of their old mill was not after all so great a calamity as first considered. That was to say, the company would derive material advantage (and thus to some extent be compensated) from the substitution of a mill of 30 stamp for that of 60. It was unnecessary for him to remind the meeting of the loss and inconvenience entailed upon the company by the large number of heads which formed the old International Mill, and which by the erection of a lesser number they would be henceforth saved. With these few remarks he begged to conclude, having expressed his readiness to reply to whatever questions were addressed to the board, by moving "That the report and accounts, as presented at this meeting, be adopted."

Mr. J. PEARLESS seconded the resolution.

Mr. TOWN said that with regard to the accounts he did not quite agree with the Chairman that the loss was only 471s., because, as he understood it, the loss, as shown by the balance-sheet now before the meeting, amounted to 481s. Mr. PEARLESS said he could not concur in the opinion expressed by the Chairman that the destruction of the International Mill was, after all, a very serious loss to the company. And, further, he desired to know why the directors had not in the accounts treated the matter of the loss thus occasioned. If, as in his opinion, it was but right they should do, the directors had written off that loss, a still larger loss than that mentioned by the Chairman would be shown upon the half-year's working.

Mr. T. G. TAYLOR, while giving the Chairman all due credit for the manner in which he had alluded to their late manager, and for the spirit in which he had deprecated any further discussion upon the subject, did not think it was to be expected that the shareholders would pass over with so slight a comment the management, or mismanagement, of their affairs by Mr. Phillpotts. As an instance of the manner in which information had been withheld from the proprietors, he might mention that the clean-up of the South Aurora for the month of June produced 88000; and that, in addition to the 84 per ton profit, would give 824,000 for that month's work. Now such facts as those not only prove the value of their mine, but the magnitude of their contracts. Yet their late manager had never informed them on those points. He felt convinced, having regard to the course of action pursued by Mr. Phillpotts, that if Captain Drake and Mr. Fearless had not arrived in Nevada at the time they did the shareholders would have lost their property altogether. It had been a critical period in the history of this company, and they might consider that the visit of those gentlemen to the mine had saved the concern. Without doubt such was the involved condition of their affairs, if the management had continued under the control of Mr. Phillpotts, the property would by this time have passed altogether out of the possession of the proprietors. Having regard, therefore, to those circumstances, he was of opinion the proprietors were greatly indebted to Captain Drake and Mr. Fearless for the timely and important services they had rendered to the company. (Hear, hear, and cheers.) Nor did their obligations to the board cease here. He desired to remind the meeting, and he thought such action spoke very highly of the good faith kept by those gentlemen with the proprietors, that the directors had become personally responsible for some of the debts of the company. Indeed, had not the members of the board come forward and assisted the concern with money from their own pockets the property would undoubtedly have been lost. Now, their Chairman had stated that the prospects of the company were somewhat cheering. Well, for his part, he did most certainly congratulate the shareholders upon the great and favourable change that had taken place, not only in their prospects but in their management. Indeed, under the altered condition of things, he thought they might really look forward to be in receipt of dividends before very long. Before concluding, he desired to take this opportunity of urging upon the proprietors the necessity in their own interests of taking up the debentures offered by the company. It was absolutely necessary that they should have a mill, and it was for the completion of the mill that the money to be raised by debentures was required. He commended very highly the strenuous exertions made by Capt. Drake to restore their mill, for without doubt the future success of the company mainly depended upon its restoration. (Hear, hear.) If the company had now a mill of its own the present returns would show an additional profit at the rate of 20,000l. per annum. Having regard to those figures, he did not think it possible to state too often or too emphatically the absolute necessity there existed for the company having, and that immediately, a mill of its own. (Hear, hear.)

The CHAIRMAN then rose to reply to the questions that had been asked. In the first place, with regard to Mr. Town's observations,

that gentleman had been perfectly right in the figures he had brought forward, if the profit and loss account were taken into consideration; but he (the Chairman) in dealing with this question of loss had simply taken up the accounts on the other side—that was, those actually relating to the receipts and expenditure at the mine. He had said in his opening remarks, and this he adhered to, that the company would not have suffered even that small loss of 470l. had they not regarded certain ore on dump as valuable, but which they had subsequently found to be worth considerably less than their original estimate. But regarding the operations of the company during the half-year from the point of view taken by the hon. proprietor, and having debited the profit and loss account with its full proportion of loss, the deficiency shown upon the six months' working was naturally much greater, and corresponded with the figures of the hon. proprietor. Then with regard to Mr. Applegarth's remarks, the explanation he (the Chairman) had to give was simply this, that the directors, as stated in their report, had resolved for the present to leave the matter of writing off whatever loss the company had sustained in the destruction of the International Mill until the completion of the re-building of the new mill. And when that was completed, and an estimated proper value of it came before the directors, then they would be able to deal with the loss of the International Mill. Mr. Applegarth had next observed it was difficult to understand the advantage to be derived by the company from the change of the 60-stamp mill to a 30-stamp mill. Well, he could only remind the meeting of the heavy expenditure and consequent loss formerly entailed upon the company by the working of a mill with so large a number of heads. Then with regard to the contract made by the company with the Big Snaky Mill alluded to by Mr. Taylor. Now, it so happened that that contract was one of the first matters that had aroused the dissatisfaction of the directors with Mr. Phillpotts' management, and upon investigating the matter they had become convinced that the gentleman did not conduct the affairs of the company in Nevada with that prudence and ability they had first credited him with. Then Mr. Taylor had asked how they were going on with respect to the debentures. Well, that was a subject he must again bring before the shareholders, and probably in doing so it was right that he should allude to the company's present financial position. He was happy to say that in Nevada it was everything they could desire. Not only were they free from debt, but Capt. Drake had even a small sum in hand, which he was desirous to retain, as it would enable him to prosecute with energy and dispatch the work of the new mill. (Hear, hear.) And this was a matter of some importance, for one of their present managers' complaints was that the money presumed to be applied for that purpose had not been expended in opening up their property as it should have been. It gave him, however, great satisfaction to repeat that the financial position of the company on the other side was one of perfect freedom from debt. (Hear, hear.) The want of sufficient working capital was, however, seriously felt there; for instance, the inability to send over the bars to this country for sale incurred a dead loss of 200l. per month. On the other hand, their position on this side was soon told. The company's debentures amounted to 6000l., and in regard to that matter he might add the shareholders had hitherto had the advantage of paying only 10 per cent. to 6 per cent. for that money, owing to, as already mentioned by Mr. Taylor, the goodness of the members of the board who had personally guaranteed the loan. Now, in the first place it was absolutely necessary that that sum should be paid off, and the directors relieved of the liability, while in addition to which they would have to find 10,000l. for the completion of the mill. Those two sums came in round figures to 15,000l., or 16,000l.; whereas the amount of debentures applied for up to the present moment amounted to only 5500l., coming through 30 shareholders out of something like 1200. Under those circumstances it was simply to put before the proprietors whether they would allow their property to be mortgaged for want of sufficient capital to carry it on. Naturally, if the debentures were offered without sufficient security there would arise the question whether it would be prudent to subscribe to them; but he did not think there could be any reasonable doubt that the security offered for those debentures was fairly good. While in addition to that was the consideration that it was to the interest of the shareholders, as proprietors in the concern, to assist the company by subscribing for debentures. Of course, if they wished the money to be raised outside the proprietary state they had no objection to it, but upon more onerous terms. There were gentlemen who had sufficient confidence in the value of the mines to advance the money, but then they would require to be paid somewhat heavily for making the loan. But he did not think the shareholders would like it to be known or repeated that the company had been obliged to resort to such means. However, whatever course was taken, the simple fact remained that it was absolutely necessary to find 15,000l. That was 6000l. to release the guarantee of the directors, and about 9000l. for the completion of the mill. He could only leave the matter in the hands of the shareholders, in full faith that they would have the debentures subscribed for, and inasmuch as the company in the affairs of the mine was a smoother and more satisfactory state than has hitherto been the case. He did not doubt the accounts received from the other side would fully justify the investment of their money. It was quite possible that proprietors might exercise too much caution and prudence, and in that way neglect what he firmly believed to be a very good investment—the debentures offered by this company.

Mr. TOWN said that in the first circular issued by the board in regard to these debentures it was not, he thought, stated how they proposed to pay them in two years, nor how they intended to deal with the profits generally. The CHAIRMAN replied that the matter was discussed very frequently, and he might state the conclusion they had come to was this, that they did not think they would be justified in paying dividends—unless the company earned a very large sum—until they had paid off the debentures. Now, with the view of explaining the opinions and motives that actuated the board in this matter, he would suppose that the company earned a large sum of money; naturally, such a circumstance would have the effect of raising the shares in the market. Before proceeding further he would remind the proprietors that they were now proposing to raise the money they required on debentures simply because, owing to the present position of the company, they could not dispose of the unissued shares at par; and by the regulations of the statute they were not permitted to issue them at anything less than their full value. Well, assuming that the company proved to be as fortunate as he supposed, and their shares rose to par and over, the holders of the debentures would be at once written to and asked if they would convert them into shares immediately; and, even if they neglected that option, the directors would have the power of selling those unissued shares in any manner over par they thought fit, and so paying off the debentures. But if, on the other hand, the company remained in its present position, and the shares did not rise, he would strongly suggest that sufficient money be retained out of the profits from the working of the mine to pay off the debentures. And he might here observe, that if the proprietors would take only a small quantity each of these unissued shares it would save all necessity of issuing debentures; but, in the meantime, they must provide funds for carrying on the company. Of course, the great obstacle to such a mode of obtaining money was the difficulty of getting all the shareholders to do it *pro rata*. But this, he feared, was an impossibility. It was hard to reconcile all the conflicting interests. Probably, therefore, the only equitable arrangement would be to raise the money from the outside public by paying a larger rate of interest; but then, at the next meeting the shareholders would doubtless reproach the board for having done so. Mr. TOWN said he had intended to take some debentures, and he might mention that he thought he would wait until the issue of the present meeting. He might mention for the benefit of his fellow-shareholders that he had been making enquiries as to the Eberhardt Mine from parties personally acquainted with and resident in the neighbourhood of this mine; and so favourable had been the accounts he had received, that he had since been purchasing shares in this concern—(hear, hear)—for he was perfectly satisfied that the property was really valuable, and would eventually prove a sound and remunerative investment. He might add that the Eberhardt Mine was termed the great property of the district. Now, funds were undoubtedly necessary for carrying out the project of the directors, and he might say that those gentlemen who were already interested in the undertaking would subscribe for the debentures. Indeed, looking at the list of shareholders, and having regard to the character and position of the proprietary, he could not believe there would be any difficulty in raising the necessary capital for carrying on the company. With the view of leading the way, he would make the first move in the matter, by stating that he would subscribe for five debenture bonds; and, if friends would follow him in that direction, he thought they could soon raise the money that was required. (Hear, hear, and cheers.) And he felt certain they would in the future have no cause of complaint. On the contrary, they would only regret that they had not more largely interested themselves in this property.

The CHAIRMAN observed that he had already informed the meeting how greatly they were indebted to Mr. Fearless for his recent visit to their property. That gentleman was at present in the room, and he (the Chairman) would now request him to address the meeting, as doubtless the shareholders were desirous of hearing a more detailed and circumstantial account of his visit to the mines than he had given. (Hear, hear.)

Mr. J. PEARLESS said he had reached Nevada in December last. On arriving there the ground had been covered with snow, and he had great difficulty in getting to the property. On examining the mine he had found that on the first or second day after his arrival they had struck a very heavy body of ore, now called the Pearlless Chamber. At the time he visited this discovery they were down 30 ft., and it had already proved certainly the most valuable point in the mine that they had yet entered. Not, however, that it assayed very richly, probably it would not give more than from 870 to 1100 per ton, but it was of a more permanent nature, and did not require much sorting. Hitherto they had been obliged to take out 4 or 5 tons of rock in order to get 1 ton of ore. They were now down about 70 ft. in that chamber, and with every prospect of its being permanent. If it continued in depth the result would be that the company possessed more ore in their mine than they had ever previously contemplated. Unfortunately, it was a common thing for a great many mining experts in that country to say, in measuring a mine, that there were some 50,000 or 60,000 tons of ore in sight, but, as a rule, those deposits, or beds of ore, were mixed with limestone and other debris, thus materially reducing the value of the property; and that, unfortunately, had been the case with the Eberhardt Mine. It was the general opinion of men working in the mine, and who were, therefore, better able to understand the thing than mere experts, because this that they were now dealing with was a new feature in mining enterprise, that the class of ore now being worked was permanent in its character, and the shareholders might rely upon its being properly treated. When he had given a report some two months previously he had been very cautious not to speak too hopefully of this discovery. They had then been down only 30 ft., but now they were down 70 ft., with every prospect of its continuance. Although the ore was not of a particularly rich quality it, at any rate, was worth 870 to 1100 per ton, and he thought that the debentures ought not only to be taken up.

Mr. WESTGARTH observed that he was considerably interested on behalf of some friends in this mine. Now, although he had come to the present meeting prepared to hear a favourable account of the property, he frankly confessed that the statement made by the Chairman had rather surpassed his expectations, particularly in regard to the fact that the company was not in debt on the other side. That he regarded as highly satisfactory. Now, he had a suggestion to make in regard to the issue of the debentures, and he thought a very slight alteration in the original arrangement would carry the whole of them off without any difficulty. In taking the debentures the shareholders had not the option of converting them into shares, or, rather, the company had the power of over-riding that option by paying them off with a 10 per cent. bonus.

The CHAIRMAN, interrupting, said such was not the intention of the board. He was very glad the hon. proprietor had brought forward the question, because he feared some misunderstanding existed in the minds of the shareholders upon the point. By the wording of the resolution, or circular, the directors gave the proprietors 30 days in which to decide as to the conversion of their debentures into shares; but, at the same time, they might come in the very next day and demand shares for their debentures; and it had been deemed necessary to fix some such period as that, because, suppose the shares rose to par, or above par, if the proprietors were allowed the two years in which to make up their minds many would ignore the fact of the shares being at 11l. or 12l., would decide deciding, and, pocketing meanwhile the 10 per cent. bonus, wait to see the course of events. Then, sup-

tard to the profit of the last six months, they amounted to close upon that was including the profits realised from the wharf, which had made £4000 for the half-year (Hear, hear.) Satisfactory as such a result thought the prospects that they had before them were still better, because wanted was quantity; and by the increase of men the proprietors would company would be gradually going on progressing to larger quantities every He might repeat that the board were determined to press with all vigour the duties of the house, so that they might get the best men to obtain the largest orders. He had been told that there was some opposition to the trade, he said that if the company were to attempt to stack a single ton of coal, so as to mate a stock, their men would immediately cease working. Referring again profits realised during the six months, he might add that they had paid priors £10,500, by way of an earnest of what they had intended to do later; that they had taken as from last year. The board now came before shareholders to submit as an interim dividend for the half year of 10 per that was to say, at the rate of 20 per cent. per annum. (Loud cheers.) I there might arise some question as to the expediency of declaring so large I tend, but he would remind the meeting that the company had advanced £95,000,—in fact, 45,000,—whereas the 10,500, and the 25,700, required previous distribution, formed only amount to something like £6000, thus difference of £89,000, but it was not to be obtained in one instalment interest, &c., leaving a clear balance of 10,000, to be carried forward to the count. At the present time they had a balance, including cash, at the bank about 31,000. Personally, he had a strong feeling in favour of the payment 10 per cent. dividend, because there were many poor shareholders who without—he might almost say suffering for many years past in consequence payment of dividends by the undertaking—and now that the tide of prosperity turned he thought they were entitled to the benefit of that success. As shareholders were well aware, some of the members of the board had advanced considerable money to the company in times when funds had been urgently required, their affairs were getting into a more prosperous condition he thought that they arrived for relieving their friends of that responsibility, and he had taken up the subject of reduction of the rate of interest, with the view of either paying or obtaining a reduction of the rate of interest, and the same had been paid. He had seen Messrs. Hausenhausen, who had advanced 10,000, upon Ludworth, and, upon seeing that gentleman had agreed to take 6 per cent., instead of 7½ per cent. the interest he had hitherto been paid. He had next gone to Mr. Gullik, who lent the company 4000, and he had also agreed to take 6 per cent. instead of 8 per cent. (Loud cheers.) The company's bankers—Messrs. Barclay, Bevan & Co.—were next conferred with, and the result of that visit had been that they advance the company the money required at the rate of 6 per cent. (Hear, hear.) Now, in regard to their operations in the future, he estimated that in three months the company would make about 24,000, from the collieries yielding like 2000, from the wharf, and 2½ would receive from Mr. Hunter 2000, so that his little contribution would be 2000. For other sums, made up of 84,000. On the other hand, he hoped to pay off Mr. Ford his 56,000, and of the steamer, which had been mortgaged to that extent, thus leaving a balance at the end of the three months of about 17,000. He (the Chairman) concluded by moving the declaration of an interim dividend, free of income tax of 10 per cent. for the past six months.—MR. J. DENOVEN seconded the

could hope was that with the improving condition and prospects of their mine, lower prices for materials and labour would rule, and that at the next meeting a much more encouraging state of affairs would be presented. He moved that the report and accounts be received and adopted.—Mr. J. PULLEN seconded the proposition.

Mr. STURGEON required for some information about the loss, and as to the actual financial position of the company.—Mr. LAYTON explained that the absolute balance against the company was 2500. Deducting the forfeited shares, a call of 1s. per share would produce 8500.—The CHAIRMAN added that the directors would certainly have to make a call, and almost immediately, but whether it would be 6d. or 1s. per share he could not at present say.

Mr. LAYTON mentioned that the ore which was now realising 3/ 14s. per ton last year sold at 5/ 5s., in addition to which costs, materials, and labour had ruled at increased prices. Had the 540 tons of ore sold during the year realised the average of last year—5/ 5s. per ton—the accounts would have shown a profit. The debit balance brought forward from the old company was 14000, and they had been paying for coals an increased price of 6s. or 8s. per ton.

Capt. RICHARDS (the manager), in reply to questions, stated that he was strongly in hope of getting ore as they approached the same cross-course as that from which (above the 50) ore was returned of the value of 35,000.—The CHAIRMAN said that some few years since ore similar to that now on the table would have realised 18/ per ton, but would not now fetch more than 8/ or 9/.

Capt. RICHARDS said their driftings were yet 12 fms. from the cross-course, and their great hope was that a course of ore would be found in connection with that cross-course; if such were not the case he personally should be much deceived and disappointed—it would take six months to prove the lode, the time depending much upon the character of the ground.—The CHAIRMAN said the driftings had been extended in that direction for some time, and there was every reason to believe that satisfactory results would be realised. He held about one-fifth of the mine, and, therefore, had a great interest in its success.

The report and accounts were received and adopted.

Mr. ANDERSON proposed that 2000. be voted to the board as their remuneration for the past year. It was no fault of the directors that profits had not been made, but when profits were made the shareholders would be better able to remunerate the directors for their services.—Mr. PULLEN seconded the proposition, which was put and carried unanimously.

Upon the proposition of Mr. PULLEN, seconded by Mr. T. WEST, the directors were unanimously re-elected.—The CHAIRMAN, on behalf of his colleagues and himself, thanked the proprietors for having re-elected them, and also for the remuneration.—Mr. A. Good was re-appointed auditor.

A vote of thanks to the Chairman and directors closed the proceedings.

NORTH ROSKEAR MINING COMPANY.

The fourth monthly meeting of adventurers was held at the mine on Thursday, under the presidency of the purser, Mr. THOMAS PRYOR. The accounts showed that the labour cost to end of June had been 2324.1, merchants' bills to end of April, 1874, making, with balance last account, 1234.1, a total expenditure of 4721.1. On the credit side there had been received from the last call, 3890.1, by sale of 23 tons of black tin, 1819.1; arsenic, 138.1; extras, 10.1; making a loss on the four months' working of 1362.1.

Capt. JOSHUA THOMAS, the manager, said that their coal bill was the heaviest item in their merchants' bills, being upwards of 1200. They were working as economically as they possibly could in every respect.—Mr. WHEAR asked if there was any probability of the coal bill being lessened next time?—Capt. THOMAS stated that it was generally the opinion of the neighbourhood that when South Roskear engine was in full work it would take off about one-third part of North Roskear water.

The PURSER said that in a financial point they were in as good a position as any mine in the county: all their bills had been paid to the end of November, and the calls had been well responded to, only 143. being owed, and that was all good.

Capt. THOMAS, after reading the agent's report, said that since the last account they had met with a splendid lode in the engine-shaft; but, unfortunately, it only lasted a short time, and was now nearly gone. Another source of annoyance to them was that the account of so much emigration, their tributaries had nearly all left them, as when men could get 4/ 6s. per month on tin work, they would not work on tribute. All their explorations were going forward with vigour, eight men being in the shaft, and nine men in each of the veins.

Mr. HALL asked if the shaft was down, and when they would resume sinking.—Capt. THOMAS replied that they had sunk 12 fms., and would commence sinking again in three months. His opinion was that the mine should be carried on as vigorously as possible.

On the motion of Mr. N. J. WEST, the accounts were received and passed, and a call of 2s. per share made.

The advisability of continuing a second agent having been discussed, it was resolved that in consequence of the falling off in the number of tributaries Capt. Justice receive one month's notice to leave; but it is to be distinctly understood that there is no complaint whatever against him.

GREAT WHEEL BUSY MINING COMPANY.

The 12-weekly meeting of adventurers was held at the mine, on Wednesday.—Mr. JOHN JOSE presiding. The accounts showed a total expenditure of 1377.1, including 2200.1 for first instalment of Jose's 90-in. engine; labour cost to June 4, 1754.1; and merchants' bills, 1394.1. On the credit side there was a balance from last account, 1676.1; received from call, less discount, 3394.1; sale of 23 tons of tin, less dues, 1508.1; leaving a balance in favour of the adventurers of 524.1.

Mr. JOSE said that, having observed a paragraph in one of the local papers referring to the management of the mine, he thought it right that he should give an account of his stewardship. In reply to the purser referring to the discharge of hands, there had certainly been some owner's account men discharged on the completion of the floors, but none else, and the men in the stops at Black Dog had been set to work on tribute. With regard to the reported inability to fork the mine, he would tell their stewardship that last night, as he would see that they had actually forked further than they had anticipated. He could assure them that no shareholder had ever been requested by him to hold his shares if he contemplated relinquishment. If parties intended to relinquish them, the sooner they did so the better, as it would be a very foolish thing for him, as the manager of the mine, to order materials for which there was no possibility of their being able to pay. With respect to the tin having been tampered with, he hardly knew the meaning of that expression, as it might be construed in various ways. However, as it brought a sort of slur on the whole of the agents employed, he felt bound to say that there were never any lot of agents in whom he had great confidence than those of Great Wheel Busy. That these paragraphs had done damage was shown by the fact that 500 shares had been relinquished, the whole of them, with the exception of five, since the publication of the statement referred to. Mr. JOSE also said, with reference to the visit of Captain Teague to the mine, that he never had the slightest notion of inviting him to take the management. In conclusion, although he did not wish to be egotistic, yet when such reflections were made he felt bound to say that he did not think in any other firms had done much more for mining than Lean, Jose, and Company had. (Applause.)

Mr. HOCKING said that the paragraph referred to had caused a great number of shares to be relinquished in the neighbourhood—Jose United.

Mr. JOSE remarked that their firm had increased their interest at every meeting, but rather than increase their interest they would have nothing more to do with it. They now held 2505 shares—more than half the mine. At a time when 800 shares were in all probability likely to come on the market (those of the late Mr. Samuel Lean) they bought the whole of them rather than suffer the mine to collapse in consequence.

Mr. HOCKING said that after the information they had received from their manager it was very satisfactory that the mine was in such a state. He would propose that a special meeting be held on Wednesday, July 23, to take into consideration the further working of the mine or otherwise.—This was seconded by Mr. WILLIAM NICHOLS, and carried unanimously.—On the motion of Mr. E. T. CARLTON, a vote of thanks to, and confidence in, the purser was unanimously agreed to.—Western Mining News.

YUDANAMITANA.—At the adjourned meeting, on Thursday, the resolutions, which were carried unanimously on June 24, were confirmed. And it was also resolved.—That Messrs. W. R. Bingley and A. W. Caswell having been elected directors by the board to complete the maximum number of directors the same be confirmed; and that Messrs. F. W. Freese and J. M. Davis be now elected as directors, in the place of Messrs. Salmon and G. Humby, whose places have been vacated.

SOUTH WARD.—At the quarterly meeting, on Tuesday (Mr. W. A. Thomas in the chair), an account of expenditure and receipts showed a cash balance of 407.1 2s. 4d.; and estimated account of liabilities and assets showed an estimated debit balance of 4500.1 2s. 4d. A call of 2s. per share was made. Capt. R. Goldworthy says.—“We have sold 13 tons lead ore, and are progressing favourably for another sampling, which, if possible, shall exceed in quantity and value the last. The engine and machinery is all in good condition and working well.”

SOUTH CARN BREA.—The twelve-weekly account was held at the mine on Saturday, the purser (Mr. Walter Pike) in the chair, who commenced the business by reading the accounts, from which it appeared that the total expenditure to end of June was 1794.1, made up by 1000.1 for labour cost, and the remainder in merchants' bills, the coal bill alone being upwards of 5000. Against this was credited 10 tons of black tin, realising, less dues, 750.1; copper ores, 914.1; leaving a balance against the adventurers of 390.1, and a loss on the 12 weeks' working of 1300.1. The Chairman regretted that their returns were so small, but partially accounted for it by the drop in the tin standard, which had made a difference of over 1000.1 to them. A long discussion followed on one or two points: the price of coal and the ability of the tin-dresser being the chief. Capt. Rich informed them that they had tried many different sorts of coal, but found the highest price to be generally the best. With regard to the tin-dresser he had every confidence in him, as had Capt. Knotwell, and he could give a most emphatic denial to the statement that any tin was wasted, a fact in which the sample book would bear him out.

BROOKWOOD MINE.—At a general meeting held at the purser's office, Liskeard, on July 3 (Mr. T. K. Dymond in the chair), the accounts to April 25 showed a profit of 837.1 2s. 4d., and also a credit balance of 790.1 15s. 9d. It was resolved.—“That this meeting approve of the course taken by the manager in regard to the ores, as named by him in his report, and in consequence thereof that the balance in favour of the adventurers be carried to the next account.” Capt. Thomas Trevelyan says.—“I am glad to say the mine, on the whole, is looking very well. We are raising about the same quantity of ore as formerly, and but for the price of copper having dropped so low our financial sheet would now have been a very satisfactory one. The alteration in our price, which I referred to in my last report, has increased remarkably well, and enabled us to pump the greater part of the water with the water-wheel, relieving the steam engine considerably, and thereby procuring a great saving in coals, which is a matter of great and vital importance to the mine, especially at this time when coals are so very costly. In consequence of the sudden drop in the standard we have thought it prudent to withhold the sale of our ore this month, believing the drop to be temporary, and we hope this course will be approved of by the shareholders.”

[For remainder of Meetings see to-day's Journal.]

GOLD AND THE GOLD FIELDS AT MALDON, VICTORIA.

The progress of the gold mining industry during the past month has been very satisfactory. Work has been carried on steadily in the old-established districts, and there have been several items of intelligence chronicled in the way of new discoveries and further developments of lines of quartz reefs at Maldon, which are especially important, as they give further proofs of the extension of quartz mining, which has at the present time reached such dimensions that it produces more gold than is obtained from the older and original system of alluvial mining. The process of quartz mining at Maldon during the past two or three years has been so rapid and prosperous that the district and its claims now monopolise almost the whole of the attention of investors and speculators in mining shares. The enormous yields which have been obtained from some of the claims fully justify the attention which investors have paid to the district. NUGGETTY REEF opened in 1856, and has produced 1,200,000. worth of gold. The deepest workings are 300 ft., and the deepest shaft over 500 ft.; the width of the reef is from 2 ft. to 30 ft., and 500 ozs. to the ton has been crushed. LANSBOTT'S REEF has produced about 27,000 ozs. of gold, is worked to a depth of 300 ft., the deepest shaft is 120 ft., the width of the ridge averages about 8 ft., and 30 ozs. to the ton has been crushed. EAGLE-HAWK REEF has produced about 300,000 ozs. of gold, is worked to a depth of 320 ft.; the deepest shaft is in the Great Southern Company's ground, now cross-cutting for the reef at 336 ft., and expect to win it daily. The width of the reef is from 10 ft. to 30 ft., and has crushed as much as 300 ozs. to the ton. BEEHIVE REEF has been sunk to a depth of 483 ft. in the Beehive Company's engine-shaft; the reef has produced about 100,000 ozs. of gold, is worked to a depth of 350 ft., and 150 ozs. to the ton has been crushed. BELL'S REEF has been working since 1855. The yields of gold have averaged 7 dwts. to 20 ozs. to the ton. NORTH OF ENGLAND REEF has been working since 1858. The yields of gold have ranged from 7 dwts. to 8 ozs. per ton.

The latest news received from the Maldon district relating to the mining progress shows that a great rise has taken place in the shares of the different mines—viz., the Union Company, 500 per cent.; Lincoln's Company, 50 per cent.; Central Company, 1500 per cent.; Beehive Hive Company, 100 per cent.; Great Western Company, 300 per cent.; Nelson Company, 200 per cent.

THE BUCKINGHAM PLUMBAGO MINES, CANADA.

Some six months since the extraordinary deposits of plumbago of unusual purity discovered at Buckingham, a few miles from Ottawa, the capital of the Dominion of Canada, and from which some large samples were exhibited in the City, were prominently referred to in the *Mining Journal*, it being then remarked that the masses of almost chemically pure blacklead there shown (the assays of Messrs. Johnson and Son, the assayers to the Bank of England, showed that but 3 per cent. of foreign matter was present) were worthy rivals of the splendid samples which formed Baron Alibert's great Plumbago Trophy at the International Exhibition of 1862. The property containing the deposits, some 1250 acres in extent, three-fourths of which is freehold, whilst the remainder is held under grants of mining rights in perpetuity free of rent or royalty, is now to be acquired by an English company—the BUCKINGHAM PLUMBAGO COMPANY—and if enormous profits be not realised it will certainly not be through lack of either quality or quantity of the mineral to be worked. The capital consists of 15,000 shares of 10/ each; and, as the purchase includes the working plant, storehouse, blacksmith's shop, stock, and a large quantity of cut and seasoned timber on the ground, the provision which has been made for 50,000, working capital must be considered ample, whilst the fact of the vendors agreeing to leave nine-tenths of the cash receivable by them to remain in the hands of the company at 5 per cent. interest affords an evidence of the confidence they have in the value of the property.

The high quality of the plumbago offered by the company is certified by some of the largest consumers of the article in this country and in the United States, and it is anticipated that no difficulty will be experienced in concluding contracts at rates which will prove very remunerative to the company, and, at the same time, advantageous to the consumers. Thus, the manager of Dixon's Blacklead and Crucible Works, Jersey City, offers to take plumbago “as sample sent” at the rate of 55/ per ton, which, as the company can obtain it at 7/ per ton, including allowance for development, plant, machinery, &c., would leave a fair margin of profit; yet that this price is not excessive may be judged of from the circumstance that the Correll Company, of New York, engaged in the same trade, put the price at 25 to 30 per cent. higher. Messrs. Taylor, Strow, and Company, the celebrated plumbago manufacturers of Philadelphia, state that they “believe the Buckingham plumbago to be superior to any other American lead which has come under their notice,” adding “plumbago for crucible purposes is in great demand, and the price high.” Mr. Waldo Dunn, pencil manufacturer, Acton, Mass., U.S., says that for the manufacture of lead pencils it is without an equal in the world; that which he has refined he is prepared “to place beside any lead now known, for it has all the good qualities—purity, lustre, great uniformity; and, lastly, fine writing and polishing properties. Nor are the opinions entertained in this country less favourable, for Mr. Vaughan Morgan, of the Patent Plumbago Crucible Company, probably the largest manufacturers in England, finds that the samples sent contain between 94 and 95 per cent. of plumbago, and asks a quotation for 1000 tons to be delivered during 12 months. It may be mentioned that the sale of 1000 tons, at only 40/ per ton, would leave the company a profit of 33,000. per annum, enough of itself to pay a very satisfactory dividend upon the entire capital. In an interesting lecture “On the Mineral Resources of the New Dominion,” delivered under the patronage of the Governor-General by Mr. H. Beaumont Small, S.C.L., the property of the Buckingham Plumbago Company is specially referred to. After mentioning the selection of the 1250 acres on the ridge between the Blanche and du Lievre rivers, he says:—

“Of course the whole of this is not mineral producing, but regard was paid to the obtaining of timber and a mill privilege on the spot to avoid the increased cost of cartage to any distance would entail. One vein of pure graphite in the seventh range, about 8 in. in width, and traceable 20 ft. on the surface, gave, after blasting, the most astonishing results. It is now exposed 150 ft. on the surface, and a shaft sunk 20 ft. down has given an increased width to the vein of 24 in., and apparently widening as the shaft proceeds. Situated on high ground, about 110 ft. above the plain level, it admits of being worked without any inconvenience from water, and affords every facility for drainage of surface water whenever requisite during the wet season. The bed of disseminated ore opened has a width of 220 ft., and a depth of 60 ft., running into the mountain, yielding from 20 to 40 per cent. of plumbago. Buildings for miners, a powder magazine, and blacksmith's shop for sharpening the picks, are already erected, and every preparation seems to have been made for pushing forward with vigour a work that will tend to create a village in what, two years ago, was, comparatively speaking, the primitive forest. Splendid water-power has been secured within a quarter of a mile from the mines on a stream issuing from a body of water known as Devine's Lake, and the timber necessary for erecting a crushing mill is hewn and already drawn on to the spot. In addition to the graphite, gold in paying quantities has lately been discovered in pyrites in the rock adjacent, and decomposed sulphuret of iron, or copperas, is visible parallel to the graphite.”

The reports of the mining engineers and others who have examined the property professionally are particularly encouraging. Mr. Wm. Plummer, M.E., remarks that the favourable condition of the property for carrying out mining operations cannot be overlooked. It has a never-failing stream of water, capable of driving any machinery and washing the ore, the elevation renders drainage unnecessary, and, he concludes, the facilities for mining the ore, the rich show of minerals in every development, and its apparently inexhaustible quantity, are conditions rarely combined. Prof. Hurd, M.A., who occupies the chair of geology and mineralogy in Knox College, Galesburg, Ill., U.S., speaks very highly upon the geological features of the property, and estimates that, in addition to the lodes, the disseminated deposits, taking the average thickness at only 12 ft., would furnish for every foot in depth from 5 to 12 tons of plumbago. Mr. W. Hooper, superintendent of the American Graphite Company's Mines, states that the pure veins are from 3 to 14 in. in thickness, and will yield 60 to 90 per cent. of plumbago. Mr. Geo. Henwood sees no material requirements which the company does not possess; the property not only contains within itself unusual elements to constitute a great and good mine by the number of the lodes and the quality of the produce, but presents great facilities for immediate and profit-

able returns, adding that the important adjuncts of water-power, fuel at nominal cost, easy transit by water and rail, and ready access to the enterprise in another column, briefly sums up the recommendations of the enterprise in the remark that the few plumbago mines that are known are mainly, if not wholly, in the hands of wealthy private proprietors, the trade being, therefore, practically a monopoly, and the opportunity for public investment in so lucrative an enterprise of rare occurrence.

FOREIGN MINES.

SERVIAN (Copper and Iron).—Brenton Symons, June 28: The progress of the mine has been very satisfactory. The work has been carried on steadily in the old-established districts, and there have been several items of intelligence chronicled in the way of new discoveries and further developments of lines of quartz reefs at Maldon, which are especially important, as they give further proofs of the extension of quartz mining, which has at the present time reached such dimensions that it produces more gold than is obtained from the older and original system of alluvial mining. The process of quartz mining at Maldon during the past two or three years has been so rapid and prosperous that the district and its claims now monopolise almost the whole of the attention of investors and speculators in mining shares. The enormous yields which have been obtained from some of the claims fully justify the attention which investors have paid to the district. NUGGETTY REEF opened in 1856, and has produced 1,200,000. worth of gold. The deepest workings are 300 ft., and the deepest shaft over 500 ft.; the width of the reef is from 2 ft. to 30 ft., and 500 ozs. to the ton has been crushed. LANSBOTT'S REEF has produced about 27,000 ozs. of gold, is worked to a depth of 300 ft., the deepest shaft is 120 ft., the width of the ridge averages about 8 ft., and 30 ozs. to the ton has been crushed. EAGLE-HAWK REEF has produced about 300,000 ozs. of gold, is worked to a depth of 320 ft.; the deepest shaft is in the Great Southern Company's ground, now cross-cutting for the reef at 336 ft., and expect to win it daily. The width of the reef is from 10 ft. to 30 ft., and has crushed as much as 300 ozs. to the ton. BEEHIVE REEF has been sunk to a depth of 483 ft. in the Beehive Company's engine-shaft; the reef has produced about 100,000 ozs. of gold, is worked to a depth of 350 ft., and 150 ozs. to the ton has been crushed. BELL'S REEF has been working since 1855. The yields of gold have averaged 7 dwts. to 20 ozs. to the ton. NORTH OF ENGLAND REEF has been working since 1858. The yields of gold have ranged from 7 dwts. to 8 ozs. per ton.

CHICAGO (Silver).—W. S. Godbe, June 18: On the 12th inst. I surveyed the route for the wire-tramway. The line, I am pleased to say, is perfectly straight, have but one or two slight rises, and will run at an angle of 16 1/2°, so that it will easily work by gravitation. The length will be about 1 1/2 miles. Every effort will be made to complete the wire-tramway in the shortest time possible consistent with economy, for, when done, more than 17, on each ton of ore, will be saved. Before the completion of this important work the ore wagons will have to be hauled from Sacramento, and the mules from Missouri. On the 9th inst. Mr. Williams commenced smelting, since which time some 27 tons of ore have been smelted daily, producing 9 tons of copper ore averaging 5 per cent. The yield of the week is sold here at 100¢, which is a very good price, but it not only confirms what has been said of the quality of the Chicago ore, but naturally lessens the cost of reduction. By the time the company's works are completed I trust to keep both stacks running, which will require a large supply of fuel for instead of 40 tons, from the readiness with which our ore is smelted, I am inclined to believe that 60 tons per day will be the capacity of the new works. In my opinion of the 7th inst. I informed you that only about 200 tons of ore were being smelted during the last month, and I think it probable that during the present one some quantity will be raised; this is in consequence of reducing the force on the works that necessary to keep smelting on the main shaft with two shifts. I have endeavoured to employ the best men who are all good workers, on the whole, I think, the best I have ever seen. I have also employed a few men from the Stockton, leased by Mr. Godbe, manager of the Chicago Mine, under the superintendence of Mr. Williams, a smelter of great experience, 9 tons of bullion a day being produced from a 20 ton furnace. One day's run reached 10 tons, which is said to be the largest ever made in Utah from a furnace of that capacity. This probably arises from the fact that no flux of any kind is used with the ore, the Chicago being, perhaps, the only mine in Utah where ore is smelted without its use. Two ore loads were taken to town on Saturday, which is sold here at 100¢, as produced. The Chicago Mining Company's wire rope (Hall's) has been received, and the line will be in operation shortly after the material arrives from San Francisco.

I. X. L. (Gold and Silver).—Mr. L. Chalmers, June 13, writes:—“Everything about the hoisting works is in excellent order, and the men are doing their best.—June 16: The shaft is now down 87 feet below the 100 level, and 6 feet for the week.”

EXCHEQUER (Gold and Silver).—Mr. L. Chalmers, June 16, writes:—“The shaft is down 88 feet, 4 feet having been made since last report. All the pile of ore on the platform and chute repaired. I expect to strike the ledge at 6 feet. Teamster still hauling ore. The boiler (mill) is not yet broken up, and assistants still at work; I am very much disgusted with the delay in getting the machinery working. The furnace which is set, and the flume being overloaded. I hope to commence hauling during the week. Log cutters and log teams busy cutting up the logs. Three of the carpenters paid off tonight—only two remaining.”

BUNKER HILL (California).—W. L. Palmer, June 18: We have fully demonstrated our ore to be excellent milling ore. We can now supply the mill from the mine with comparative ease, as we have the stopes well raised up to good ore, and have developed at the highest point of the raise and in the bottom of the pit of ore, and it runs both north and south from the point in the stopes where we first developed it. We have continued to drive the 170 drift down the slope, and a considerable distance further south than the stopes have been seen. We have one here that will yield 850 per ton, and some over 300 per ton, and will bring the average yield of the whole mass of ore considerably up. We are immediately above this new discovery yielded in the mill 890 per ton. During the past year we have been chiefly occupied in opening and developing the mine, so to be ready for extensive crushing of ore in the near future. We have now 1000 ft. of drifts and galleries, have put the machinery at mine and mill in repair, have constructed new tracks outside, have built a new and better mill, mine to mill, and made numerous important additions and improvements. In addition to mention, but all of which will be of special value in the future working on a large scale, for which we are preparing. In every part of the mine we have good pay ore, and one thing is certain, there is no better section of the Mother lode in the State. The yield of the fourth run in the mill is 819 1/2 per ton, showing a steady improvement in the value of ore (an advance of 83 per ton over last run). Cost of mining and milling is 25 per ton.

BATTLE MOUNTAIN.—Capt. Richards, June 12: Virgin: Daniel's mine in the bottom of the 113 north is sinking at 80 per foot, producing coarse stones of ore. Pearce's mine in the bottom of the 113, north of Daniel's mine, is 70 ft. below the 113, or equal to 183 ft., where a drift has been encountered, but, owing to the scarcity of men, is suspended. The stopes in the back of the 113, south of John's rise, are nearly exhausted. Manuel's rise in the back of the 73 is suspended, and the men put to open up stopes in the same level south of it. The stopes in the back of the 145 produce some rich ore. In the back of the 77 the lode is turning out fair quantities of ore.—Wasp: Owing to scarcity of men this is idle. I intend putting a rise through from the 37 to surface, over Jerry's rise. Truscott's mine below this rise is now being worked, and will be a new sink in the Virgin's shaft, which, there being a hard bar of ground, would be costly, and would get further away from the lode the deeper we go, and is almost entirely out of the ore ground.

—June 19: Virgin: Daniel's mine having reached a point 70 ft. below the 113 is suspended; the lode therein produced good stones of ore, which being 183 ft. low the surface, and 84 ft. deeper than any ore of importance met with near Virgin shaft, I look upon as very important. It will be impossible to stop its lode to advantage until the new shaft is down, the men declining all remuneration for a contract. Pearce's mine is down 73 ft. below the 113, and is now commenced southward there from Daniel's, but an excessive price being demanded for doing the work I have suspended it until we can come towards it from the shaft at half the price. In the back of the 145 the lode produces some good ore. In the back of the 73, south of Manuel's rise, the lode produces some small quantity of ore. In the back of the 73, north of Virgin's shaft, the lode produces good ore in green carbonate. 540 sacks raised during the fortnight.

CEADAR CREEK.—T. B. Ludlum, June 7: None of our claims will be ready to clean up for several days yet. Those now running are the Eastern Pacific, Central, Home Ticket, and Jehoshaphat, the latter nearly completed opening for tunnel No. 1. In tunnel No. 1 the gravel has turned quite soft, and is now making fine progress. I have concluded to continue this work in completion this summer, so as to be ready for next season at its commencement. The gravel through which we are tunnelling is quite rich, through some 30 or 40 ft. of bed rock; and in the adjoining claim, the Summerset, the owners have sunk down to the blue gravel, and through 100 ft. above us, have very rich gravel, indicating that we may expect large returns when we get fairly opened up. I am crowding the work, intending to make another run with as many claims as possible. Our water is failing very fast, and would have been reduced to less than 1000 ft. this time, but for that which I have purchased enabling me to hold a portion in reserve, and thus extend the season.

TOLIMA.—June 28: The manager reports 15 fms. 2 feet 2 in. of ground expended, of which 9 fms. 1 in. 5 in. were unproductive, leaving 6 fms. 0 in. 9 in. productive, which yielded 82 per fathom of the whole lode depth. Writing under date May 17, the manager states.—“During the month of May workings were holed, and within the last few days the lode has been opened, and one branch 8 in. wide, of solid ore have made their appearance in this stoping. Welton's workings.” The manager goes on to say.—“Samples taken from the different stations this month show a decided improvement in the value of the lode,” and he adds “the 60 ft. level stopes will turn out 1 ton of ore per fathom of the average value of 320 ozs. pure silver; whilst the 10 ft. level, in the cross-cut branch, 3 in. gave 430 ozs. of fine silver per ton.” With respect to the future development of the mine the manager states.—“We expect to make very important discoveries of ore in Welton's workings in a few days time, that may very much alter our estimates of the cost of bringing the mine into permanent profit; and for this reason do not send the special report upon this subject promised in my last letter.”

NEWFOUNDLAND.—Mr. G. E. Webster, one of the directors, has inspected the property, and reports (June 28) that for a distance of 600 yards the shafts have been sunk, all reaching the adit level, with the exception of the last, and this is about half way down. According to the elevation of the ground, these shafts vary in depth: some are 170 ft. deep, others about 120 ft., and it is from these that levels are driven horizontally from whence the ore is extracted. The levels will yield 2 tons per 18 ft. The quality of the ore is very fine, and will produce 82 per cent. of metallic lead. The assays made at the Royal School of Mines, Laboratory more than confirm this estimate. Mr. J. C. Butterfield, from the Royal School of Mines, who accompanied Mr. Webster, calls the attention of the directors to the advisability of erecting smelting works, the fact being that the abundant cheap labour, cheap coal, and a good supply of building materials, whereby the cost of freight and carting would be diminished. The only for the erection of furnaces need not be excessive; and, though skilled labour in the first instance would have to be imported, yet in a short time intelligent men would be able to conduct the operation themselves, as the process of smelting is a very simple one.

WEST CANADA.—June 20: The stopes in the back of the 60, east of Bray's shaft, will yield 2 tons of ore per fathom. In the bottom of the 35, east of this shaft, the stopes will yield 2 1/2 tons per fathom; and in the bottom of the same level, west of Palmer's shaft, we have a stopes yielding 4 tons per fathom.

[For remainder of Foreign Mines, see to-day's Journal.]

NEW QUEBRADA.—The agent in Venezuela reports the arrival of the contractors' engineers, charged with the construction of the mine, and says that they are greatly surprised at the state of things around them, adding that he does not fear any lack of labour, which is already flowing in.

STATISTICS OF BRITISH DIVIDEND TIN, LEAD, AND COPPER MINES FOR THE YEAR 1872.

Compiled by G. V. MORGAN, F.S.A., Purser of the East Baleswidden Mine.

Name of mine.	Capital.		Market value.		Dividends.		Percentage of dividends.			Description.
	Shares.	Paid-up.	Total.	Per share.	Total.	Per share.	Aggre- gate, '72.	Total.	Capital.	
Admiral's	6,000	£ 5 0 0	£ 54,000	£ 9 0 0	£ 48,000	£ 8 0 0	48,000	256,650	80	Tin
Admiral's	4,266	10 14 10	41,136	67 0 0	287,833	10 12 6	48,645	431,032	99	Tin
Admiral's	15,000	4 5 0	75,000	38 0 0	570,000	2 16 0	42,000	120,000	66	Lead
Admiral's	9,000	5 0 0	45,000	30 0 0	270,000	3 0 0	27,000	550,000	10	Lead
Admiral's	12,000	35 0 0	35,000	150 0 0	150,000	15 0 0	15,500	30 1,000	44	Tin
Admiral's	12,000	6 0 0	72,000	15 0 0	180,000	1 4 0	14,400	37,200	20	Lead
Admiral's	12,000	7 10 0	90,000	19 0 0	228,000	1 1 0	12,600	15,600	14	Lead
Admiral's	512	1 5 0	640	180 0 0	92,160	24 0 0	12,288	357,632	1920	Copper
Admiral's	4,295	5 4 6	22,441	15 0 0	64,425	2 0 0	8,560	40,373	38	Tin
Admiral's	4,000	5 15 0	23,000	15 0 0	60,000	2 0 0	8,000	38,200	35	Tin
Admiral's	2,450	19 14 0	40,357	27 0 0	66,130	3 15 0	9,187	28,114	19	Tin
Admiral's	6,400	0 9 0	31,200	14 0 0	69,600	1 2 0	7,200	84,400	230	Tin
Admiral's	10,240	0 2 0	1,024	7 0 0	71,680	0 12 0	6,144	1,102,960	600	Copper
Admiral's	6,000	6 4 0	37,200	8 10 0	51,000	1 0 0	6,000	24,900	18 4 5	Copper & tin
Admiral's	15,000	4 0 0	60,000	15 0 0	225,000	0 6 0	4,700	225,750	7 1/2	Copper & tin
Admiral's	4,000	1 16 0	7,200	6 0 0	24,000	1 2 0	4,400	8,900	61	Lead
Admiral's	3,000	0 10 0	30,000	12 0 0	36,000	1 10 0	4,500	154,125	15	Lead
Admiral's	6,100	0 6 0	1,920	6 0 0	38,400	0 12 0	3,840	200	10	Lead
Admiral's	1,024	8 10 0	8,704	17 10 0	17,200	3 15 0	3,840	63,693	44	Lead
Admiral's	20,878	2 10 0	52,195	5 10 0	114,829	0 3 6	3,653	1,091,050	7	Lead
Admiral's	6,400	5 0 0	32,000	10 0 0	40,000	0 7 0	2,240	5,410	7	Lead
Admiral's	512	5 2 6	2,624	60 0 0	30,720	2 5 0	1,280	326,656	19	Tin & copper
Admiral's	400	47 0 0	18,800	45 0 0	18,000	0 9 0	3,600	44	4 1/2	Copper
Admiral's	20,000	7 0 0	140,000	9 10 0	150,000	0 3 6	3,600	8,000	2 1/2	Copper
Admiral's	9,000	4 10 6	40,725	5 0 0	45,000	0 8 0	3,600	68,850	8 8 9	Copper
Admiral's	200	91 5 0	18,250	140 0 0	28,000	16 0 0	3,200	123,500	17 1/2	Tin & copper
Admiral's	2,048	28 13 9	54,655	18 0 0	36,864	1 7 6	2,818	7,424	5 1/2	Tin
Admiral's	2,800	25 0 0	70,000	10 0 0	70,000	0 3 0	2,800	226,100	4	Lead
Admiral's	25,000	1 0 0	25,000	3 0 0	75,000	0 3 0	2,775	2,775	15	5
Admiral's	2,000	10 12 6	21,250	16 0 0	32,000	1 0 0	2,800	9,300	13	8 1/2
Admiral's	858	18 15 7	16,112	8 0 0	7,094	2 10 0	2,147	16,118	13 1/2	Tin & copper
Admiral's	5,000	3 0 0	15,000	3 0 0	17,500	0 10 0	2,500	15,123	10	8 1/2
Admiral's	2,048	2 13 10	5,513	7 0 0	14,336	1 0 0	2,018	20,489	37	14 1/2
Admiral's	3,950	3 10 6	13,924	3 10 0	13,925	0 10 0	1,975	14	14	19
Admiral's	80	70 0 0	5,600	200 0 0	14,000	24 10 0	1,960	41,800	35	12 1/2
Admiral's	5,179	7 14 6	40,907	6 10 0	31,863	0 7 6	1,942	3,491	5	5 1/2
Admiral's	5,000	1 11 6	7,752	4 5 0	21,250	0 7 6	1,875	2,500	24	8 13 1/2
Admiral's	1,128	10 6 7	12,409	29 0 0	24,400	0 10 0	1,880	11,180	14 1/2	7 1/2
Admiral's	40,000	1 0 0	40,000	0 0 0	0 0 0	0 0 0	1,500	1,500	4	Copper
Admiral's	12,000	2 10 0	30,000	6 10 0	38,400	0 5 0	1,477	94,380	5	3 1/2
Admiral's	5,908	40 0 0	236,320	6 10 0	38,400	0 5 0	1,436	92,006	9 1/2	5 1/2
Admiral's	6,144	2 14 6	16,516	4 10 0	27,840	0 5 0	1,113	1,113	13 1/2	4 1/2
Admiral's	2,784	3 0 0	8,352	10 0 0	27,840	0 8 0	1,100	75,725	10 1/2	10 1/2
Admiral's	1,924	10 0 0	10,240	10 0 0	10,240	1 1 0	1,000	2,954	1 1/2	1 1/2
Admiral's	5,500	3 5 0	17,875	7 0 0	35,000	2 0 0	1,900	55,000	2	2 6 1/2
Admiral's	500	100 0 0	50,000	70 0 0	60,000	0 0 0	1,900	900	5	1 15 4
Admiral's	1,000	2 12 6	2,625	3 0 0	64,000	0 16 0	800	2,800	39	12 1/2
Admiral's	806	13 17 6	12,432	8 0 0	7,148	0 1 0	896	75,573	73 1/2	12 1/2
Admiral's	4,096	10 14 6	43,930	5 10 0	23,528	0 4 0	817	75,573	73 1/2	12 1/2
Admiral's	1,500	10 0 0	15,000	0 0 0	0 0 0	0 0 0	750	17,750	5	3 1/2
Admiral's	6,400	2 10 0	16,000	0 0 0	0 0 0	0 0 0	610	7,680	4	70
Admiral's	300	32 0 0	9,600	0 0 0	0 0 0	0 0 0	600	62,550	6 1/2	651
Admiral's	256	96 0 0	24,576	0 0 0	0 0 0	0 0 0	512	512	2 1 1/2	2 1 1/2
Admiral's	5,000	2 0 0	10,000	2 0 0	11,250	0 2 0	500	1,500	5	15
Admiral's	10,000	1 0 0	10,000	0 0 0	0 0 0	0 0 0	500	500	5	5
Admiral's	10,000	1 0 0	10,000	1 15 0	17,500	0 10 0	400	400	4	4
Admiral's	400	18 15 0	7,500	0 0 0	0 0 0	0 0 0	400	221,000	5 1/2	2,905
Admiral's	2,048	3 19 6	7,117	0 0 0	0 0 0	0 0 0	256	29,184	7 1/2	40
Admiral's	242	36 17 9	8,927	0 0 0	0 0 0	0 0 0	121	4,175	1 1/2	46

SALES OF COPPER ORES.

COPPER ORES SOLD AT THE CORNISH TICKETINGS FOR THE QUARTER ENDING JUNE 30, 1873.

Mine.	Tons.	Amount.
South Caradon	1270	£ 890 4 6
Dean Great Consols	2656	4,355 4 6
West Seton	778	481 0 0
West Tolgus	310	340 17 0
Crover and Abraham	581	3672 11 0
South Crofty	859	2813 4 6
Glasgow Caradon	639	2718 6 0
Marke Valley	603	2273 9 0
Phoenix	317	1539 1 0
East Caradon	361	1633 7 0
South Carn Breva	152	1449 14 0
Breakwood	316	1414 9 0
West Basset	175	1589 15 6
East Pool	474	1329 3 6
Higginson Down	370	1213 13 0
Prince of Wales	227	1129 16 0
Wheal Basset	140	1076 3 0
Carn Breva	273	980 10 6
Bedford United	360	831 18 6
Croft Moor	205	924 4 0
Glasgow Copper	246	764 9 0
Mellinar	225	733 17 0
New Rosewarne	63	765 5 6
Gunnislake (Clitters)	177	550 13 6
West Seton	137	543 13 0
West Maria and Fortescue	150	500 10 0
Carn Carnborne	111	387 0 0
West Caradon	123	372 17 0
Wheal Russell	115	324 7 6
Wheal Croft	100	323 15 0
Wheal Grenville	73	216 13 0
South Dolcoath	70	226 11 0
Wheal Friendship	70	226 11 0
New Dolcoath	56	222 2 0
New Penbroke	42	211 1 0
Belaton	27	197 15 6
Wheal Hüller	21	162 4 6
North Rosewarne	16	160 8 0
St. Ann's United	12	111 18 0
Wheal Rose	26	100 2 0
North Crofty	12	91 0 0
Wheal Danse United	12	91 0 0
Pennance	32	87 9 6
Florence and Tonkin	43	81 19 0
Poldice	19	81 14 0
South Frances	16	62 0 0
East Seton	50	55 0 0
South Condurrow	7	48 2 6
Wheal Trevelar	14	47 5 0
Crimm Consols	15	39 7 6
North Tolcarne	5	17 12 6
Wheal Boys	10	15 0 0
Wheal Grenville	4	14 6 0
South Tolcarne	5	1 19 0

COMPANIES BY WHOM THE ORES WERE PURCHASED.		
	Tons.	Amount.
Vivian and Sons	2304	£ 8,646 7 11
P. Grenfell and Sons	1254	6,208 2 6
Neville, Drace, and Co.	2515	8,566 3 11
Williams, Foster, and Co.	2998	15,104 19 4
Mason and Elkington	2212	8,163 15 3
Copper Miners' Company	784	4,573 3 1
Charles Lambert	1067	4,374 15 6
Sweetland, Tuttle, and Co.	40	146 5 0
Total	13,174	£ 56,173 12 6

COPPER ORES SOLD AT THE SWANSEA TICKETINGS FOR THE QUARTER ENDING JUNE 30, 1873.

Mines.	Tons.	Amount.
Knoekmahon	1175	£ 7,324 19 6
Bercham	579	2,748 19 6
Ballycunnisk	252	1,086 16 0
Furdon	200	485 18 0
Tigrony	18	407 5 0
Cloncurry	10	344 0 0
Cappagh	16	225 4 0
Total	2250	£ 12,623 1 0

COLONIAL.			
Cape	2074	£26,915	7 6
Moonta	1068	19,860	14 6
Concordia	92	3,189	5 0
Wallaroo	202	2,264	16 0
Australian	12	348	0 0
Total	3448	£52,578	3 0

FOREIGN.			
Del Soto	390	£ 2,859	10 0
Soberal	153	1,130	3 6
Union	108	924	17 0
Telhaddella	808	828	17 0
Lisbon	27	473	18 0
Spanish	34	368	1 0
Italian	20	185	16 0
Total	779	£ 6,761	2 6

RECAPITULATION.

British	2250	£ 12,623 1 0
Colonial	3448	52,578 3 0
Foreign	779	6,761 2 6
Sundries	175	558 17 0
Total	6652	£ 70,520 3 6

COMPANIES BY WHOM THE ORES WERE PURCHASED.

Tons.		Amount.
Copper Miners' Company	615	£ 7,687 15 6
P. Grenfell and Sons	119	699 13 0
Neville, Drace, and Co.	1473	12,426 8 6
Vivian and Sons	606	13,791 15 6
Williams, Foster, and Co.	1021	13,288 15 3
British and Foreign Copper Company	440	9,737 1 9
Mason and Elkington	495	9,181 0 0
Charles Lambert	955	12,838 17 3
Havenhead Copper Company	729	12,291 14 0
Sweetland, Tuttle, and Co.	379	11,028 8 3
Landore Copper Company	247	4,569 14 6
Total	6652	£ 102,521 3 6

FOREIGN MINING AND METALLURGY.

The Niederfischbach Mines and Foundries Company have reported progress for 1872-3, and the results disclosed are not of a favourable character. The rough profits realised for the year were not sufficient to meet the general expenses, and 2933*l.* had to be taken from the reserve fund, which was reduced in consequence to 2954*l.* The French Railway Plant Company is enabled to distribute a dividend of 30*s.* per share for the past year, the profits of which were 19,353*l.* Sundry preliminary expenses were also discharged out of the profits of the year. The company has received some important orders for the current year, and the amount of work done during the twelve months promises to be at least equal to that executed in 1872. The net profits realised by the Ahun Collieries Company in 1872 amounted to 15,680*l.*; this result admitted of a dividend of 24*s.* per share, 2880*l.* being also carried to the special new works fund.

There is still no great change to report in the Belgian coal trade, but a movement one way or the other is daily anticipated. The Belgian Minister for Foreign Affairs has received from the Belgian Consul at Rusthuck a report on the advantages which would result to Belgium from furnishing coal to Roumania and Bulgaria. No doubt such a trade would be advantageous to Belgium, but the question is whether it is possible at present quotations. Coke now stands at about 2*l.* per ton in Belgium. The French coal trade remains in an uncertain state, but the future course of affairs will probably become more decided in a few days. While it must be admitted that coal maintains its price, the great industrialists abstain from giving out fresh orders, and it may be said with truth that the industrial world of France is only drifting on from day to day. The continuous arrivals of English and German coal on the markets of the Nord and at Paris induce some hope of a fall in prices on the part of those who desire such a decline.

The stagnation apparent in French metallurgical affairs has become more decided, orders being restricted to the most urgent requirements of daily consumption. This observation does not apply to any particular locality, but it extends to all the centres of French metallurgical industry. At St. Dizier a contract for 100 tons of refining charcoal-made pig has been concluded at 7*l.* 4*s.* per ton. While furnaces are being blown out in the Champagne group, new ones are being equipped in the Meurthe-et-Moselle district; this latter centre is

ROCK DRILLING MACHINERY.



Edon Davidson, and Warrington's
Patent.

References, particulars,
Estimates, &c.,
Sent on application.

CHARLES BALL AND CO., lately Sole Agents for
THE BURLEIGH ROCK DRILL,
ARE NOW PREPARED TO SUPPLY THEIR NEW
ROCK-BORING MACHINE, OR "POWER JUMPER,"
Which they consider far superior to any other Rock-boring Machinery existing, and which they have, therefore, undertaken to bring before the public. The Firm's principle
"INVENTORS OF NONE—AGENTS FOR THE BEST"

Secures to its customers the best known machinery, as the Firm is entirely impartial in its adoption of any particular style of machines.

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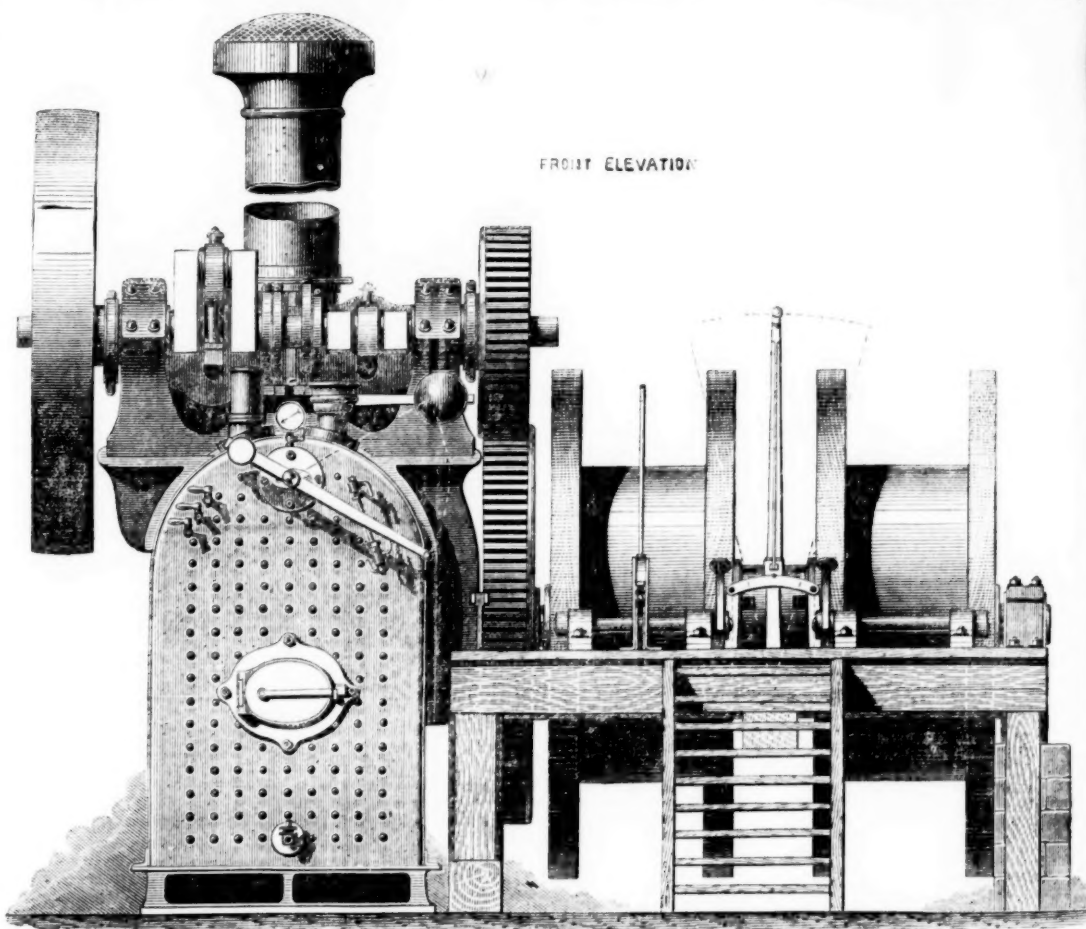
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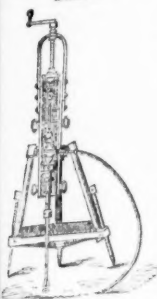
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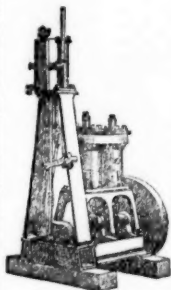
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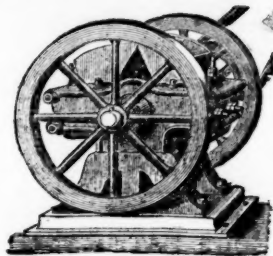
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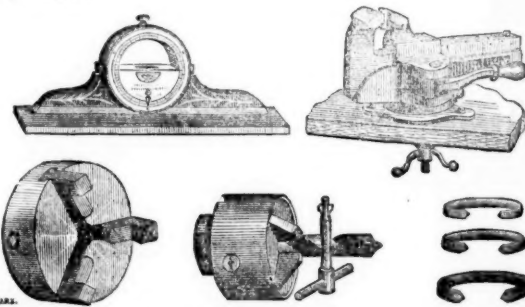
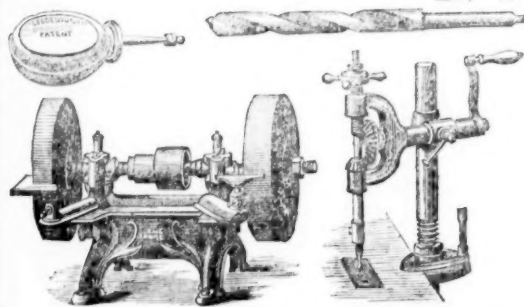
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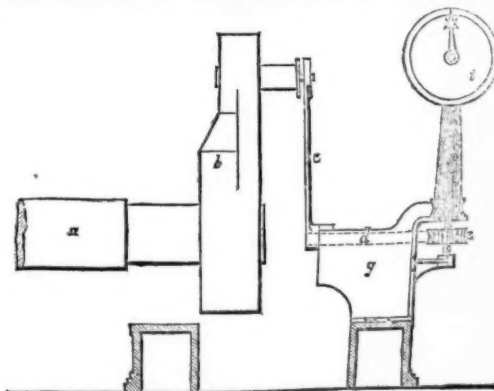


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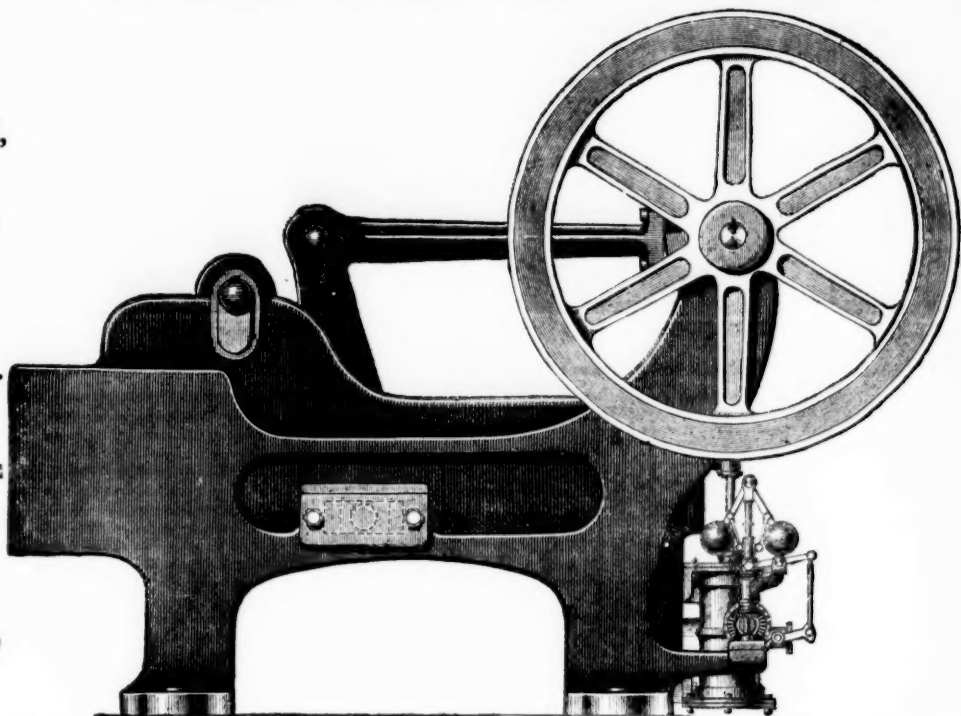
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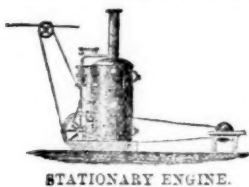
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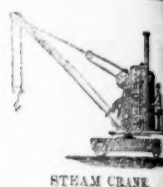
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